

UPPER COLUMBIA RIVER

2009 Quality Assurance Project Plan for the Beach Sediment Study Amendment No. 2

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SECTION A: PROJECT MANAGEMENT

A1 TITLE AND APPROVAL SHEET

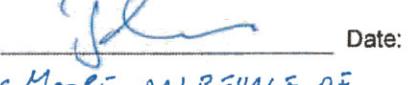
**2009 QUALITY ASSURANCE PROJECT PLAN
FOR THE BEACH SEDIMENT STUDY
AMENDMENT NO. 2**

Approvals

EPA Project Coordinator: Helen Bottcher  Date: 2/9/2011

EPA Quality Assurance (QA) Manager: Gina Grepo-Grove  Date: 2/9/2011

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ACRONYMS AND ABBREVIATIONS

EPA	U.S. Environmental Protection Agency
MRL	method reporting limit
QA/QC	quality assurance and quality control
QAPP	quality assurance project plan
RI/FS	remedial investigation and feasibility study
TAI	Teck American Incorporated
UCR	Upper Columbia River

A3 DISTRIBUTION LIST

EPA Project Coordinator:	Helen Bottcher
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A4 INTRODUCTION

A4.1 Introduction

The beach sediment study represents one of the tasks that will be completed as part of the remedial investigation and feasibility study (RI/FS) being conducted for the Upper Columbia River (UCR) Site. The objective for the RI/FS is to investigate the nature and extent of unacceptable risk at the Site, assess risks to human health (to be completed by the U.S. Environmental Protection Agency [EPA]) and the environment (to be completed by Teck American Incorporated [TAI]), and develop and evaluate potential remedial alternatives for the Site.

This amendment presents proposed modifications to the March 2009 beach sediment study quality assurance project plan (QAPP; Integral et al. 2009) and the proposed 2011 field sampling schedule. The QAPP was developed for the study of sediments at selected beaches subject to human use in the UCR and describes the organization, data quality objectives, study design, analytical procedures, and quality assurance and quality control (QA/QC) procedures upon which the sediment study of beaches is based. The QAPP focused on the study of 34 beaches along the UCR, although elevated water elevations during the two rounds of beach sediment field sampling activities performed in 2009 and 2010 limited the number of completed beaches sampled to date (Figure A-1).

Modifications presented herein address select sampling locations and testing methods. The modified sample location coordinates for the remaining beaches are presented in Appendix A. All other field sampling and sample handling procedures, laboratory analyses, QA/QC measures, and data validation activities remain unchanged from the approved QAPP.

The required cultural and technical oversight, as outlined in the QAPP (Integral et al. 2009) and described in recent communications with EPA (Tonel 2010, pers. comm.), is included in the proposed 2011 beach sampling schedule provided in Table A1. Modifications to the cultural resources oversight procedures that were presented in the Cultural Resource Coordination Plan (i.e., Attachment D to the QAPP), are described in Section A4.2.3 below.

A4.2 Modifications

A4.2.1 Sampling Design

Select changes were made to the original sampling design presented in the March 2009 QAPP. Each is summarized below:

Sampling areas at remaining beaches were refined to encompass fine-grained sediments as determined through on-site reconnaissance activities completed in conjunction with EPA. Revised sample areas are shown on Figures A-2 through A-26. A detailed summary of the proposed sampling location coordinates are provided in Appendix A.

1. Kamloops Island Beach and Crescent Bay Beach: The available sampling areas at these beaches is 1,369 m² and 2,502 m² respectively, which is limited compared to the mean 2011 beach area size of 41,900 m², therefore the sampling design for surface samples at each beach was modified from 5 composites of 12 samples per composite (5×12) to 5 composites of 7 samples per composite (5×7). Sampling areas are shown on Figures A-5 and A-26.
2. Based on consultation and direction by EPA (Stifelman 2010, pers. comm.), AA Campground 2 Beach was repositioned to better reflect the target location for the human health risk assessment (see Figure A-12).
3. At the request and direction of EPA the Swimming Hole Beach (Figure A-27) was added to the beach sediment sampling program. Because the beach is a relatively small area at 2,502 m², the surface sampling design parallels the design for Kamloops Island Beach and Crescent Bay Beach with 5 composites of 7 samples per composite (5×7). There will be 5 subsurface samples at Swimming Hole Beach.

A4.2.2 Analytical Methods

The QAPP (Integral et al. 2009) lists alternate analytical methods in Tables A-5 and A-7 for select metals, which would be used depending on initial method results as follows:

- Arsenic will be analyzed by EPA Method 7062 if it is not detected at the method reporting limit (MRL) by EPA Method 6020, (Tables A-5 and A-7, QAPP, Integral et al, 2009).
- Lead will be analyzed by EPA Method 6020 if it is not detected at the MRL by EPA Method 6010 (Table A-5, QAPP, Integral et al. 2009).
- Selenium will be analyzed by EPA Method 7742 if it is not detected at the MRL by EPA Method 6020 (Table A-5, QAPP, Integral et al. 2009).

The MRL for arsenic using EPA Method 6020 is significantly lower than both the traditional subsistence scenario risk based concentration (RBC) and recreational preliminary remediation goal (PRG) presented in Table A-7 in the QAPP (Integral et al. 2009). Also, based on EPA's 2005 study and the 2009 and 2010 beach sediment validated results, it is unlikely that arsenic will not be detected using EPA Method 6020.

The MRL for lead using EPA Method 6010 is significantly lower than both the traditional subsistence scenario RBC and recreational PRG presented in Table A-7 in the QAPP (Integral et al. 2009).

The MRL for selenium using EPA Method 6020 is significantly lower than the analyte-specific subsistence scenario RBC and the mean sediment detection limit for selenium established by EPA following the 2005 site beach sediment study, as outlined in Table A-7 of the QAPP (Integral et al. 2009).

Analyses for these metals using the secondary analytical methods is not necessary to establish exceedances to the risk-based concentrations; therefore, as a modification to the QAPP, arsenic and selenium will only be analyzed using EPA Method 6020, and lead will only be analyzed using EPA Method 6010.

Plastic sieves are used by the testing laboratory to separate the <2 mm particle fraction of the surface and subsurface sediment samples. To assess any potential introduction of phthalates from the sieves, one equipment rinsate sample will be collected for every 20 samples sieved, according to the following procedure:

- An aliquot of deionized water will be rinsed through each sieve fraction. The volume of deionized water used for rinsing each fraction will be determined based on the volume required for the associated test procedures (i.e., organic extractions will require 1 liter each, metals will require 500 milliliters).
- The aliquot from each fraction will be stored in the appropriate container. Amber glass jars will be used for organic parameters and high-density polyethylene jars will be used for metals. Metals samples will be preserved with nitric acid.
- Rinsate blanks will be logged into the laboratories' information system and analyzed for the same parameters as the sediments and reported accordingly.

A4.2.3 Cultural Oversight

At the request and direction of the UCR cultural resources working group and EPA, due to the Swimming Hole Beach sampling area being located in a culturally sensitive area the following additional procedures will be taken during the 2011 beach sampling program:

- Prior to sampling, a Colville Confederated Tribe cultural resource monitor must complete a reconnaissance of the sampling location. This reconnaissance must be conducted at a time when the water elevation and exposed area is comparable to that expected during the actual sampling. No pin flags marking individual sampling locations will be present at the time of the reconnaissance.

- If sensitive materials are found in the sampling area, sampling will need to shift to the south and east at least 20 m from sensitive material.
- If the shift cannot be accommodated, sampling will be suspended at the location.
- During sampling, the cultural resource monitor(s) must be ahead of the sampling team, not following, and sample collection will only commence once the monitor(s) have cleared the location.

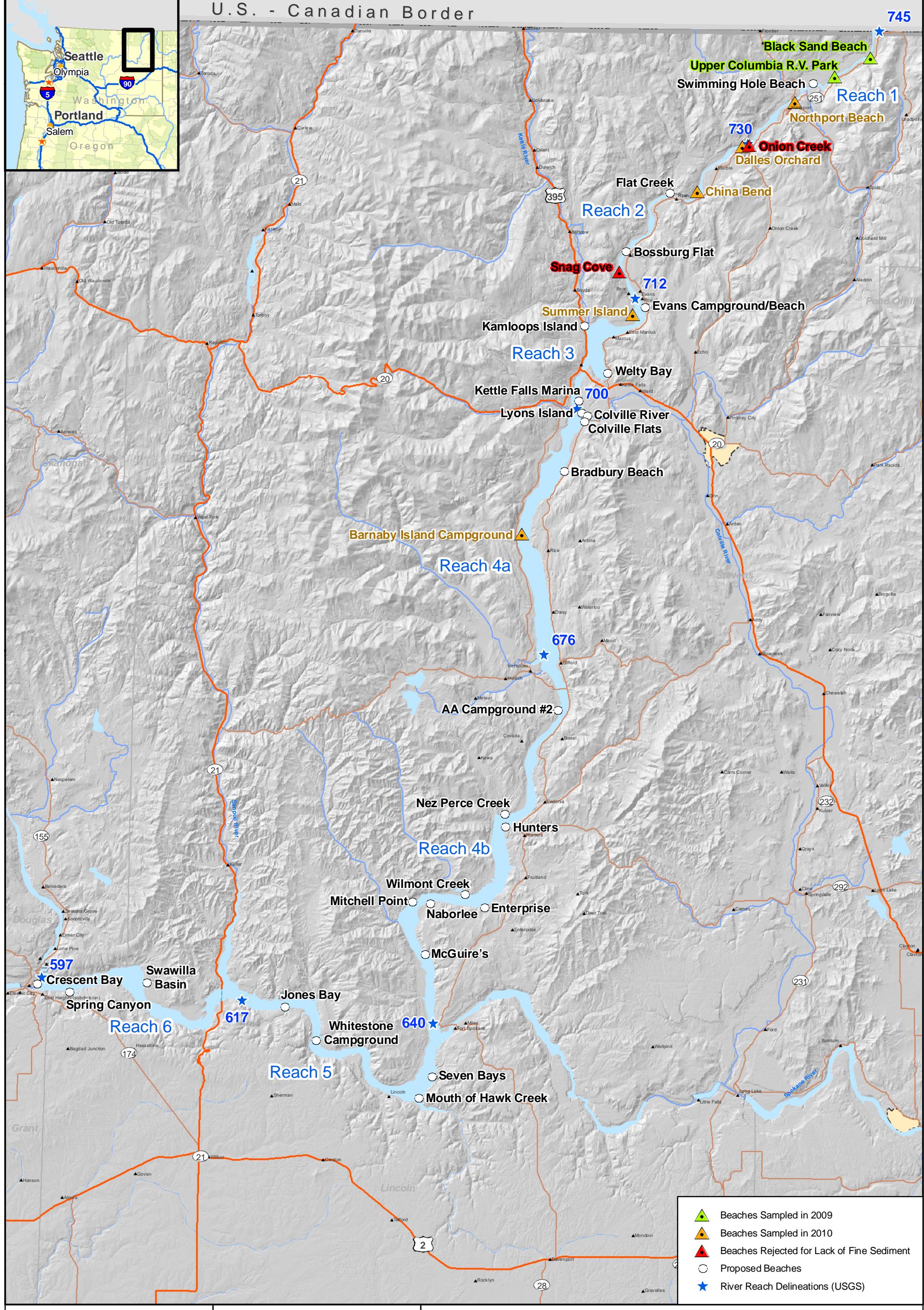
SECTION B: REFERENCES

Integral, Parametrix, HydroQual, and AINW. 2009. Upper Columbia River quality assurance project plan for the 2009 beach sediment study. Integral Consulting Inc., Mercer Island, WA; Parametrix, Inc., Bellevue, WA; HydroQual, Inc., Mahwah, NJ; and Archaeological Investigations Northwest, Inc., Portland, OR.

Stifelman, M. 2010. Personal communication (e-mail to J. Moore, Integral Consulting, Inc., Portland, OR, dated August 4, 2010, regarding relocation of AA Campground 2 Beach sampling area). U.S. Environmental Protection Agency, Region 10, Seattle, WA.

Tonel, M. 2010. Personal communication (e-mail to M. Adzic, Teck American Incorporated, Spokane, WA, dated November 2, 2010, regarding cultural resources oversight). U.S. Environmental Protection Agency, Region 10, Seattle, WA.

FIGURES



- ▲ Beaches Sampled in 2009
- ▲ Beaches Sampled in 2010
- ▲ Beaches Rejected for Lack of Fine Sediment
- Proposed Beaches
- ★ River Reach Delineations (USGS)









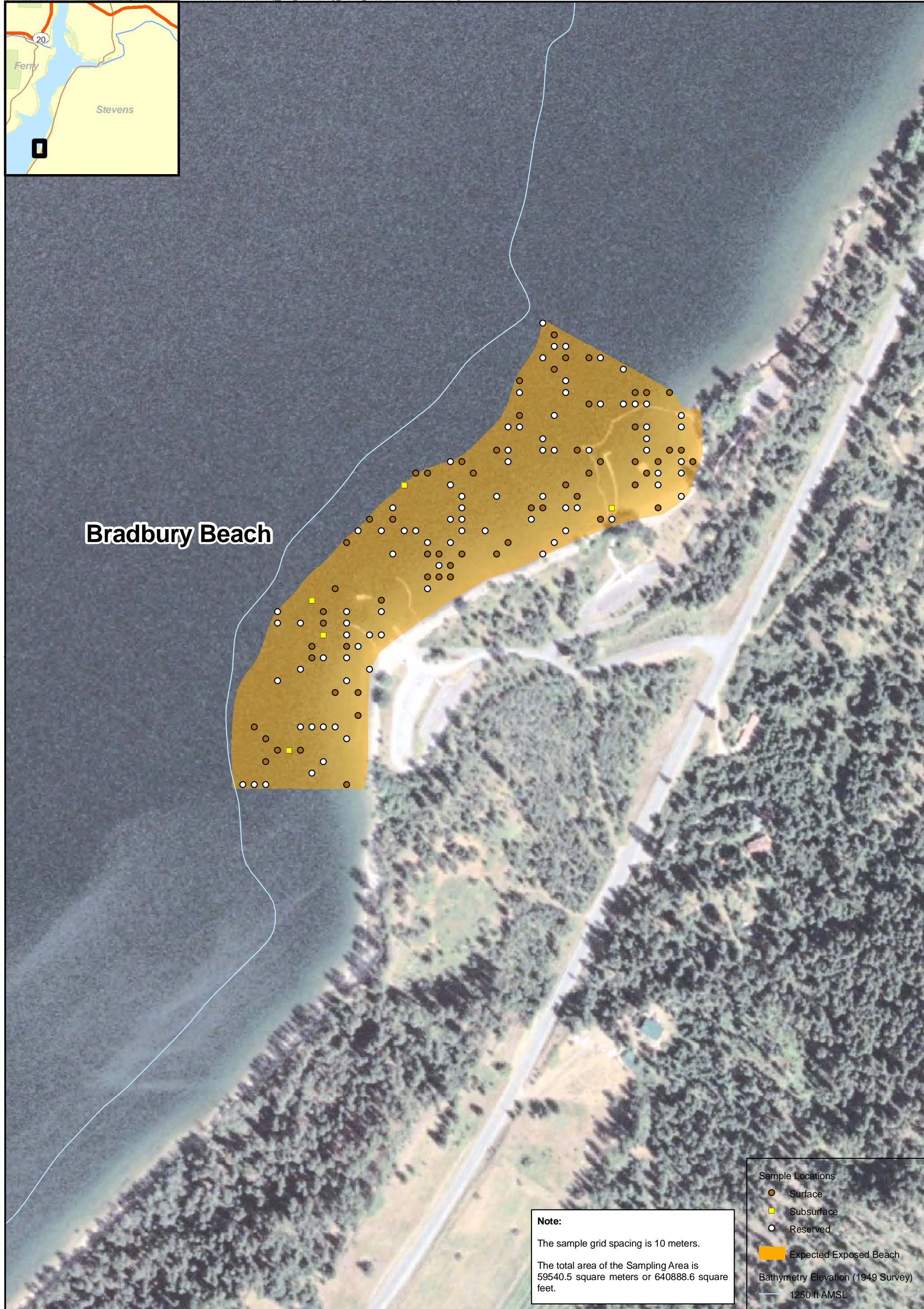








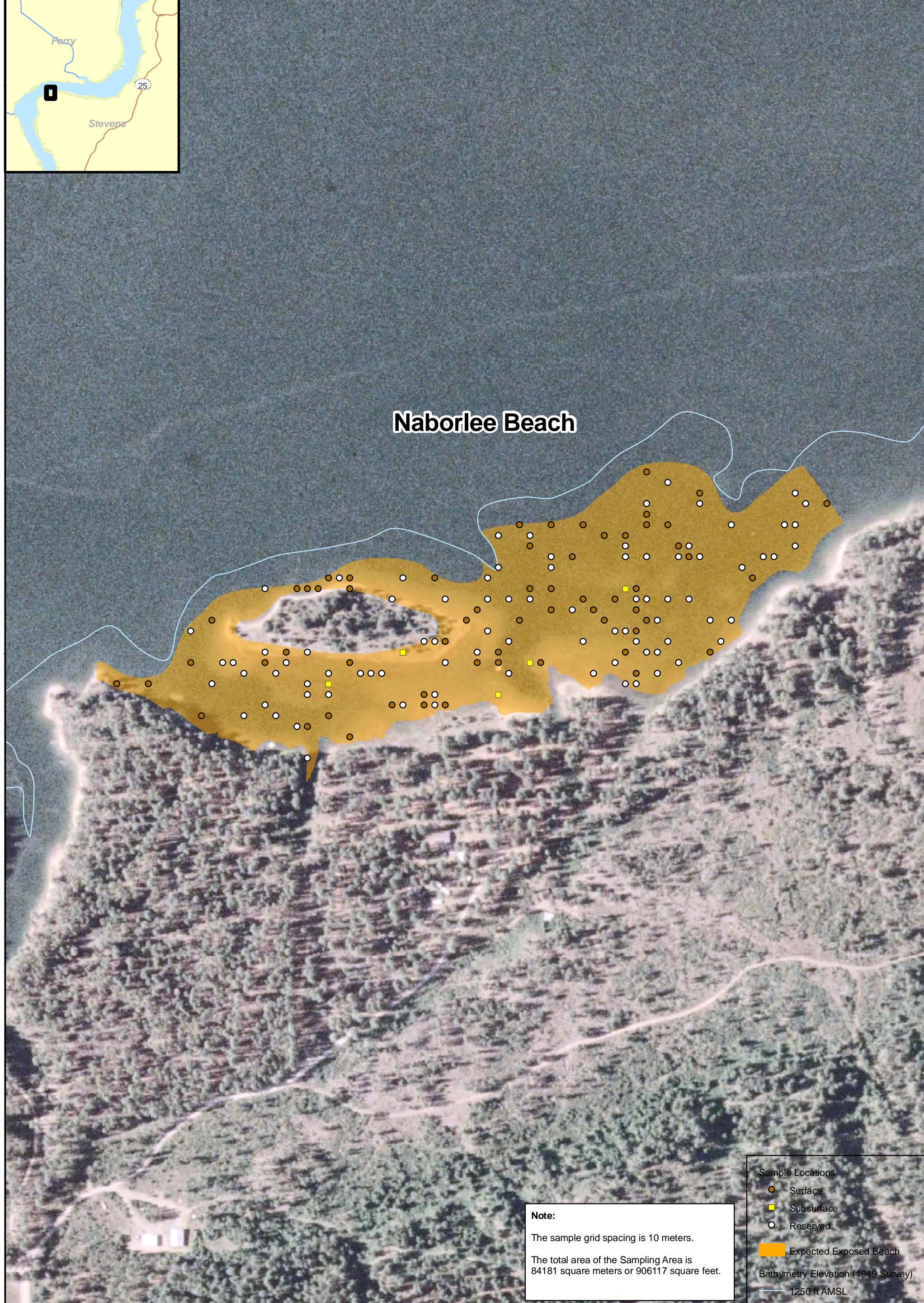




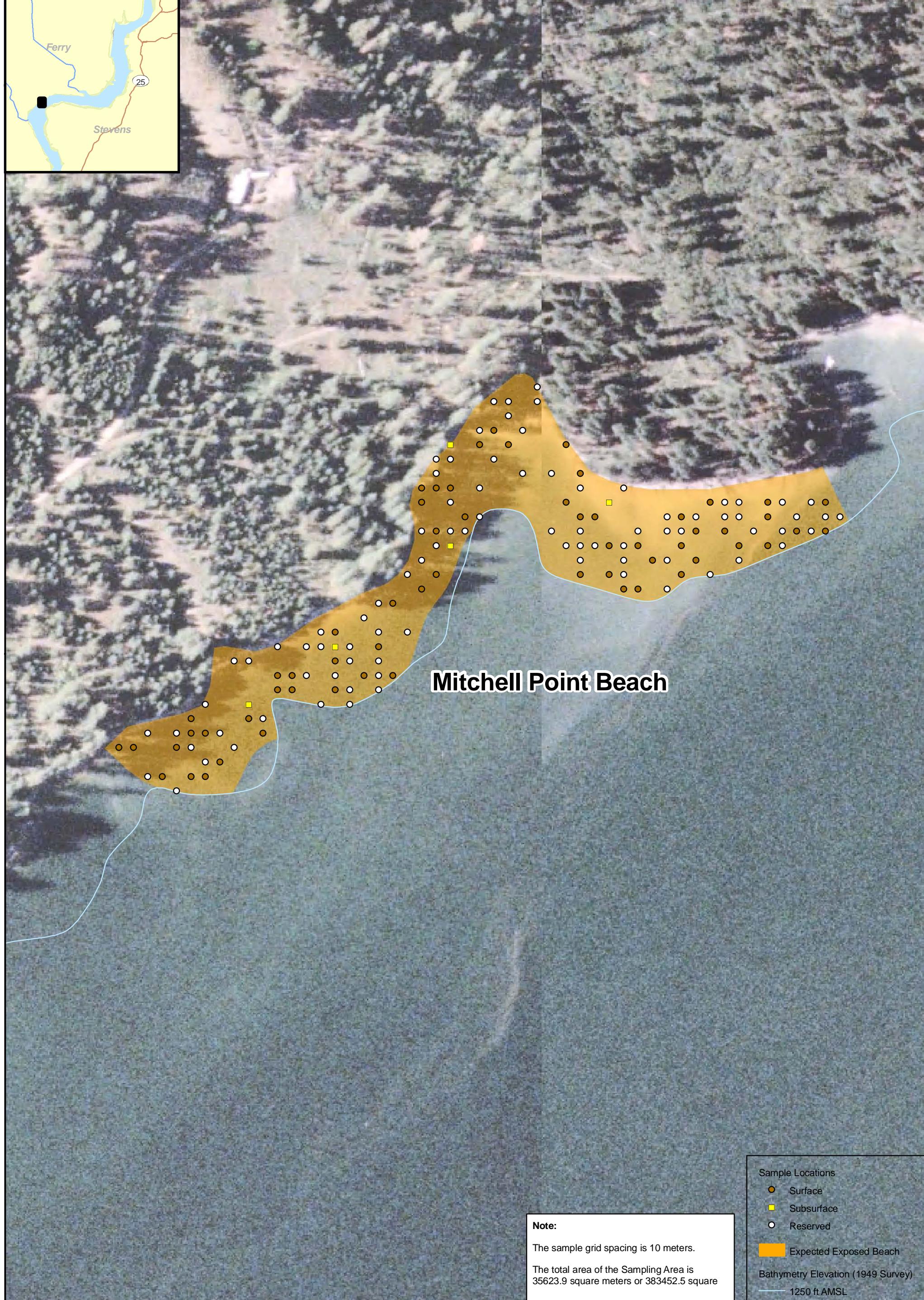








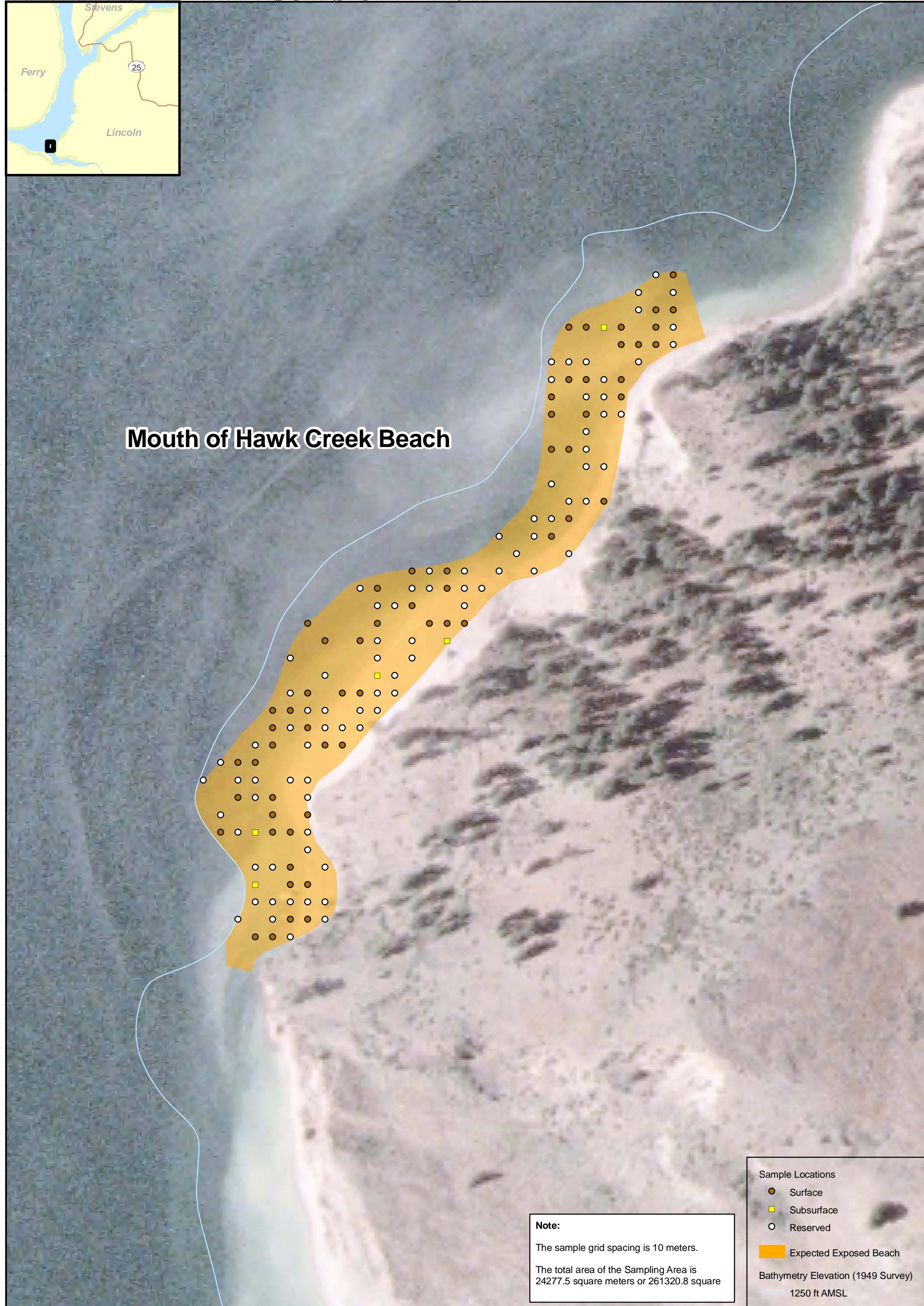


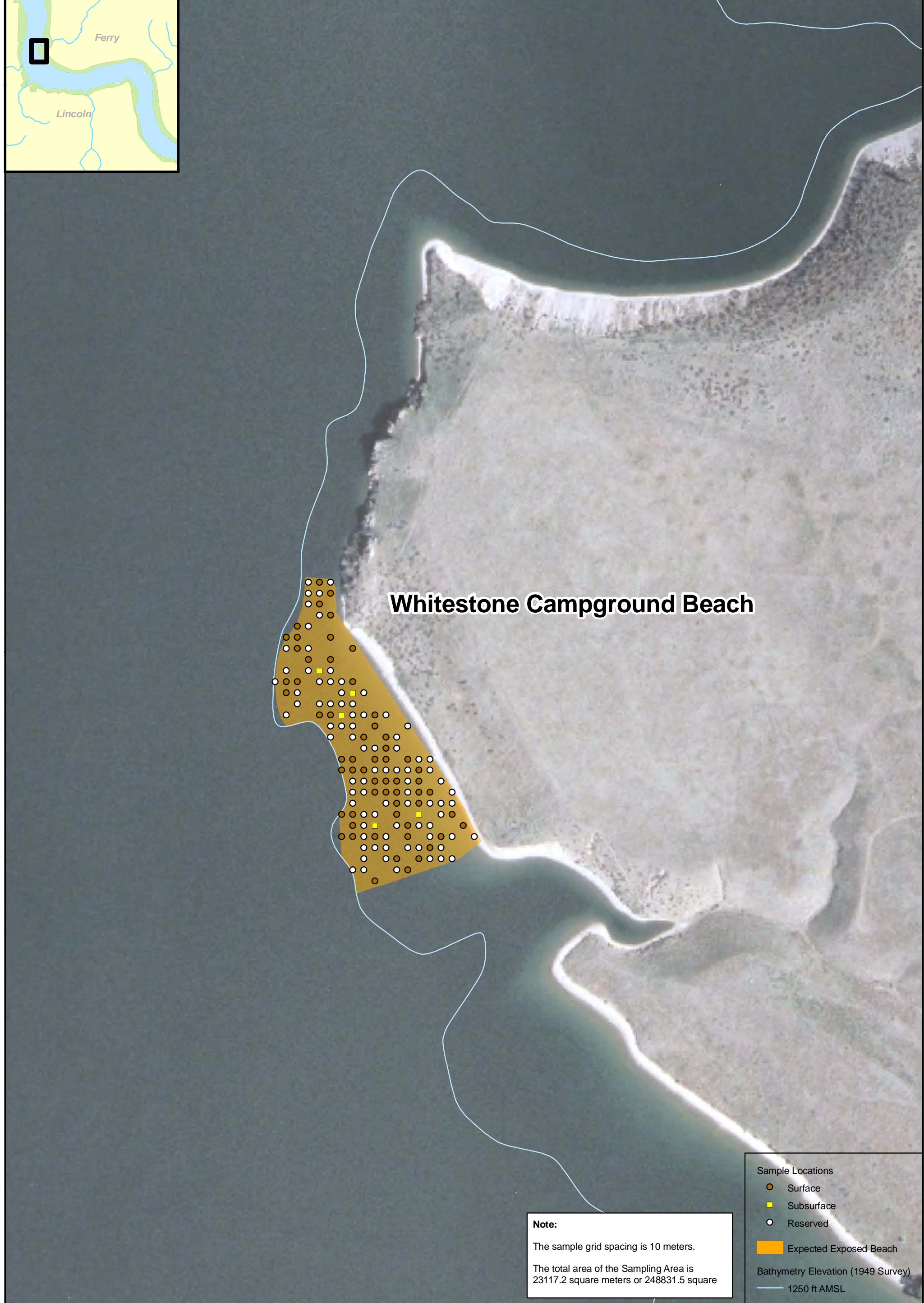




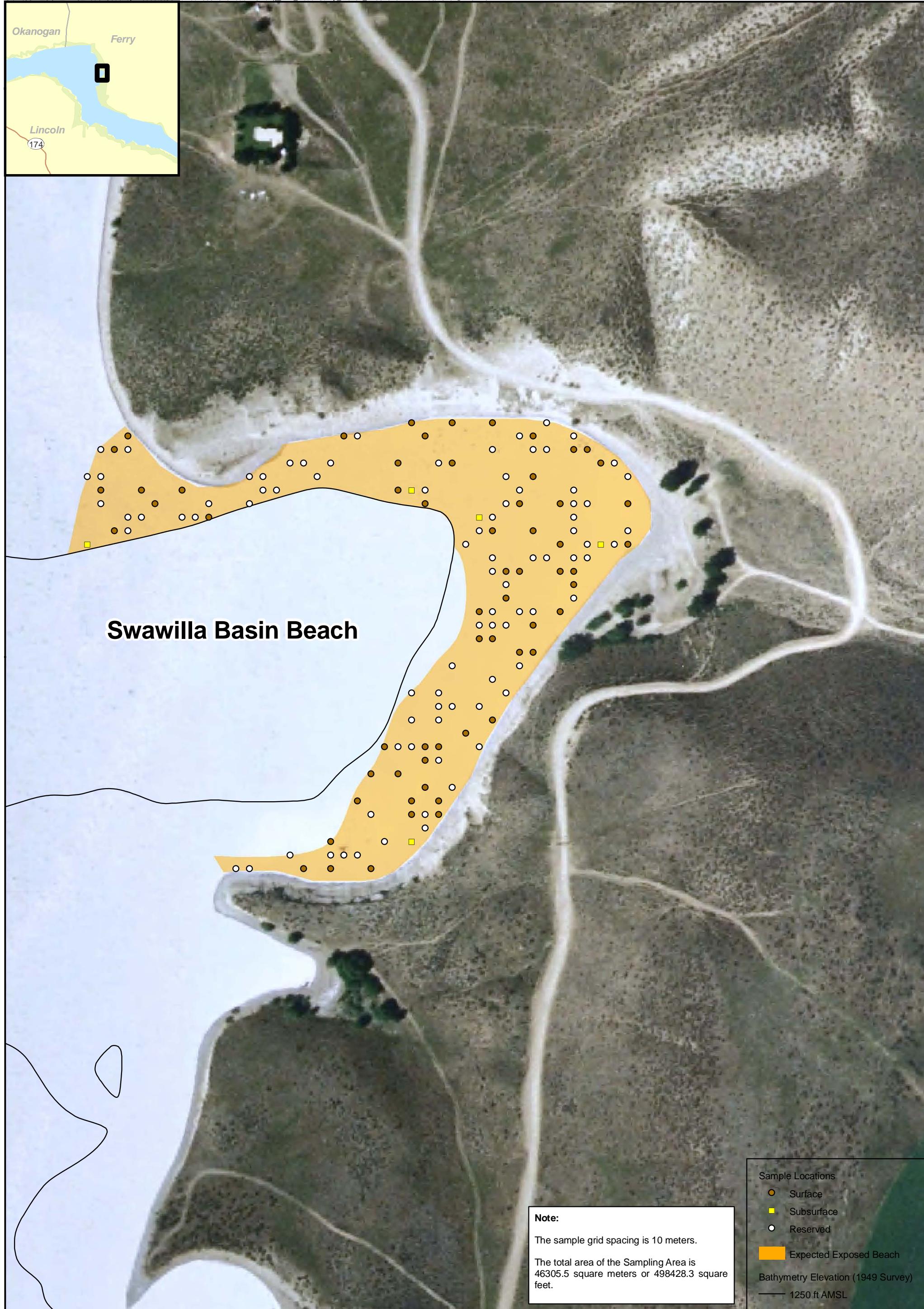


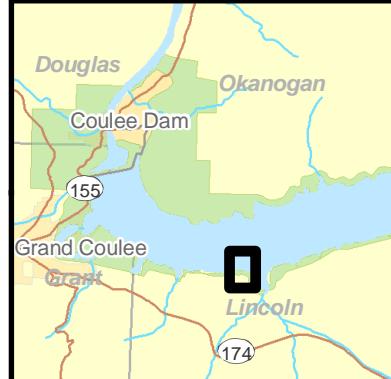












Spring Canyon Beach



Sample Locations
● Surface
■ Subsurface
○ Reserved
■ Expected Exposed Beach
Bathymetry Elevation (1949 Survey)
— 1250 ft AMSL

Note:

The sample grid spacing is 10 meters.

The total area of the Sampling Area is 44637.3 square meters or 480471.9 square feet.

Meters
0 25 50

Feet
0 100 200



Figure A25.

Spring Canyon Beach

Upper Columbia River, WA





TABLES

Table A1 - UCR 2011 Beach Sediment Sampling Schedule¹

Month	Date	Team 1^{2,3}	Team 2^{2,4}
April	Wednesday, April 20, 2011		Mobilization
	Thursday, April 21, 2011	Swimming Hole	Evans Campground
	Friday, April 22, 2011	Flat Creek	Welty bay
	Saturday, April 23, 2011	Boszburg	Kamloops Island
	Sunday, April 24, 2011	Lyons Island	Kettle Falls Marina
	Monday, April 25, 2011	Colville River	Colville Flats
	Tuesday, April 26, 2011	AA Campground	Bradbury
	Wednesday, April 27, 2011	Nez Perce	Hunters
	Thursday, April 28, 2011		Mobilization Day
	Friday, April 29, 2011	Wilmont Creek	Seven Bays
May	Saturday, April 30, 2011	Enterprise	Hawk Creek
	Sunday, May 01, 2011	Naborlee	Jones Bay
	Monday, May 02, 2011	Mitchell Point	Swawilla Basin
	Tuesday, May 03, 2011	McGuires	Spring Canyon
	Wednesday, May 04, 2011	Whitestone Campground	Crescent Bay
	Thursday, May 05, 2011		Demobilization

Notes:

- 1 - This preliminary schedule is set based on the most likely time for maximum maintenance drawdown of water levels behind the Grand Coulee Dam and the lowest mean river discharge entering the site, which in turn are climate and snowpack dependant; therefore, these dates are subject to change.
- 2 - Oversight is provided by Colville Confederated Tribe, Spokane Tribe, USEPA, National Park Service and URS Corporation to ensure all field data collection complies with the Cultural and technical oversight requirements outlined in the 2009 QAPP and the 2010 QAPP amendment 2.
- 3 - Team 1 consists of two vessels with 2 boat crew on each that will transport the 7 sample crew members and 3 oversight personnel to the daily designated beach from a pre-determined boat ramp.
- 4 - Team 2 consists of 2 cargo vans and 1 minivan that will transport 7 sample crew members to the daily designated beach. Oversight personnel will travel independently.

APPENDIX A

2011 BEACH SEDIMENT SAMPLE LOCATION COORDINATES

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	FC-122	Surface	428500.83700000000	5407863.12780000000
2	FC-136	Surface	428460.83700000000	5407858.12780000000
3	FC-369	Surface	428565.83700000000	5407788.12780000000
4	FC-118	Surface	428480.83700000000	5407863.12780000000
5	FC-94	Surface	428455.83700000000	5407868.12780000000
6	FC-364	Surface	428540.83700000000	5407788.12780000000
7	FC-138	Surface	428470.83700000000	5407858.12780000000
8	FC-353	Surface	428530.83700000000	5407793.12780000000
9	FC-77	Surface	428455.83700000000	5407873.12780000000
10	FC-43	Surface	428495.83700000000	5407888.12780000000
11	FC-305	Surface	428535.83700000000	5407813.12780000000
12	FC-327	Surface	428575.83700000000	5407808.12780000000
13	FC-10	Surface	428450.83700000000	5407898.12780000000
14	FC-390	Surface	428550.83700000000	5407773.12780000000
15	FC-151	Surface	428535.83700000000	5407858.12780000000
16	FC-250	Surface	428545.83700000000	5407833.12780000000
17	FC-384	Surface	428560.83700000000	5407778.12780000000
18	FC-140	Surface	428480.83700000000	5407858.12780000000
19	FC-389	Surface	428545.83700000000	5407773.12780000000
20	FC-373	Surface	428545.83700000000	5407783.12780000000
21	FC-365	Surface	428545.83700000000	5407788.12780000000
22	FC-18	Surface	428490.83700000000	5407898.12780000000
23	FC-163	Surface	428485.83700000000	5407853.12780000000
24	FC-130	Surface	428430.83700000000	5407858.12780000000
25	FC-398	Surface	428550.83700000000	5407768.12780000000
26	FC-141	Surface	428485.83700000000	5407858.12780000000
27	FC-57	Surface	428500.83700000000	5407883.12780000000
28	FC-155	Surface	428445.83700000000	5407853.12780000000
29	FC-93	Surface	428450.83700000000	5407868.12780000000
30	FC-270	Surface	428500.83700000000	5407823.12780000000
31	FC-99	Surface	428480.83700000000	5407868.12780000000
32	FC-13	Surface	428465.83700000000	5407898.12780000000
33	FC-260	Surface	428520.83700000000	5407828.12780000000
34	FC-226	Surface	428510.83700000000	5407838.12780000000
35	FC-182	Surface	428475.83700000000	5407848.12780000000
36	FC-55	Surface	428490.83700000000	5407883.12780000000
37	FC-199	Surface	428465.83700000000	5407843.12780000000
38	FC-330	Surface	428525.83700000000	5407803.12780000000
39	FC-223	Surface	428495.83700000000	5407838.12780000000
40	FC-123	Surface	428505.83700000000	5407863.12780000000
41	FC-292	Surface	428540.83700000000	5407818.12780000000
42	FC-31	Surface	428495.83700000000	5407893.12780000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	FC-47	Surface	428450.83700000000	5407883.12780000000
44	FC-388	Surface	428540.83700000000	5407773.12780000000
45	FC-354	Surface	428535.83700000000	5407793.12780000000
46	FC-143	Surface	428495.83700000000	5407858.12780000000
47	FC-116	Surface	428470.83700000000	5407863.12780000000
48	FC-293	Surface	428545.83700000000	5407818.12780000000
49	FC-1	Surface	428455.83700000000	5407918.12780000000
50	FC-45	Surface	428440.83700000000	5407883.12780000000
51	FC-396	Surface	428540.83700000000	5407768.12780000000
52	FC-361	Surface	428570.83700000000	5407793.12780000000
53	FC-346	Surface	428545.83700000000	5407798.12780000000
54	FC-186	Surface	428495.83700000000	5407848.12780000000
55	FC-107	Surface	428520.83700000000	5407868.12780000000
56	FC-170	Surface	428520.83700000000	5407853.12780000000
57	FC-266	Surface	428550.83700000000	5407828.12780000000
58	FC-215	Surface	428545.83700000000	5407843.12780000000
59	FC-383	Surface	428555.83700000000	5407778.12780000000
60	FC-298	Surface	428570.83700000000	5407818.12780000000
61	FC-230	Subsurface	428530.83700000000	5407838.12780000000
62	FC-110	Subsurface	428440.83700000000	5407863.12780000000
63	FC-243	Subsurface	428510.83700000000	5407833.12780000000
64	FC-181	Subsurface	428470.83700000000	5407848.12780000000
65	FC-351	Subsurface	428570.83700000000	5407798.12780000000
66	FC-144	Reserved	428500.83700000000	5407858.12780000000
67	FC-211	Reserved	428525.83700000000	5407843.12780000000
68	FC-218	Reserved	428470.83700000000	5407838.12780000000
69	FC-114	Reserved	428460.83700000000	5407863.12780000000
70	FC-134	Reserved	428450.83700000000	5407858.12780000000
71	FC-103	Reserved	428500.83700000000	5407868.12780000000
72	FC-192	Reserved	428525.83700000000	5407848.12780000000
73	FC-119	Reserved	428485.83700000000	5407863.12780000000
74	FC-80	Reserved	428470.83700000000	5407873.12780000000
75	FC-87	Reserved	428505.83700000000	5407873.12780000000
76	FC-41	Reserved	428485.83700000000	5407888.12780000000
77	FC-30	Reserved	428490.83700000000	5407893.12780000000
78	FC-11	Reserved	428455.83700000000	5407898.12780000000
79	FC-222	Reserved	428490.83700000000	5407838.12780000000
80	FC-51	Reserved	428470.83700000000	5407883.12780000000
81	FC-190	Reserved	428515.83700000000	5407848.12780000000
82	FC-355	Reserved	428540.83700000000	5407793.12780000000
83	FC-84	Reserved	428490.83700000000	5407873.12780000000
84	FC-224	Reserved	428500.83700000000	5407838.12780000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	FC-66	Reserved	428475.83700000000	5407878.12780000000
86	FC-62	Reserved	428455.83700000000	5407878.12780000000
87	FC-220	Reserved	428480.83700000000	5407838.12780000000
88	FC-237	Reserved	428480.83700000000	5407833.12780000000
89	FC-162	Reserved	428480.83700000000	5407853.12780000000
90	FC-333	Reserved	428540.83700000000	5407803.12780000000
91	FC-280	Reserved	428550.83700000000	5407823.12780000000
92	FC-278	Reserved	428540.83700000000	5407823.12780000000
93	FC-201	Reserved	428475.83700000000	5407843.12780000000
94	FC-165	Reserved	428495.83700000000	5407853.12780000000
95	FC-279	Reserved	428545.83700000000	5407823.12780000000
96	FC-387	Reserved	428535.83700000000	5407773.12780000000
97	FC-25	Reserved	428465.83700000000	5407893.12780000000
98	FC-249	Reserved	428540.83700000000	5407833.12780000000
99	FC-188	Reserved	428505.83700000000	5407848.12780000000
100	FC-273	Reserved	428515.83700000000	5407823.12780000000
101	FC-73	Reserved	428510.83700000000	5407878.12780000000
102	FC-329	Reserved	428520.83700000000	5407803.12780000000
103	FC-108	Reserved	428525.83700000000	5407868.12780000000
104	FC-12	Reserved	428460.83700000000	5407898.12780000000
105	FC-368	Reserved	428560.83700000000	5407788.12780000000
106	FC-172	Reserved	428530.83700000000	5407853.12780000000
107	FC-158	Reserved	428460.83700000000	5407853.12780000000
108	FC-157	Reserved	428455.83700000000	5407853.12780000000
109	FC-42	Reserved	428490.83700000000	5407888.12780000000
110	FC-178	Reserved	428455.83700000000	5407848.12780000000
111	FC-350	Reserved	428565.83700000000	5407798.12780000000
112	FC-189	Reserved	428510.83700000000	5407848.12780000000
113	FC-146	Reserved	428510.83700000000	5407858.12780000000
114	FC-251	Reserved	428550.83700000000	5407833.12780000000
115	FC-363	Reserved	428535.83700000000	5407788.12780000000
116	FC-381	Reserved	428545.83700000000	5407778.12780000000
117	FC-121	Reserved	428495.83700000000	5407863.12780000000
118	FC-227	Reserved	428515.83700000000	5407838.12780000000
119	FC-385	Reserved	428565.83700000000	5407778.12780000000
120	FC-185	Reserved	428490.83700000000	5407848.12780000000
121	FC-69	Reserved	428490.83700000000	5407878.12780000000
122	FC-65	Reserved	428470.83700000000	5407878.12780000000
123	FC-245	Reserved	428520.83700000000	5407833.12780000000
124	FC-133	Reserved	428445.83700000000	5407858.12780000000
125	FC-213	Reserved	428535.83700000000	5407843.12780000000
126	FC-176	Reserved	428445.83700000000	5407848.12780000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	FC-98	Reserved	428475.83700000000	5407868.12780000000
128	FC-101	Reserved	428490.83700000000	5407868.12780000000
129	FC-75	Reserved	428445.83700000000	5407873.12780000000
130	FC-92	Reserved	428445.83700000000	5407868.12780000000
131	FC-214	Reserved	428540.83700000000	5407843.12780000000
132	FC-282	Reserved	428560.83700000000	5407823.12780000000
133	FC-289	Reserved	428525.83700000000	5407818.12780000000
134	FC-295	Reserved	428555.83700000000	5407818.12780000000
135	FC-139	Reserved	428475.83700000000	5407858.12780000000
136	FC-267	Reserved	428555.83700000000	5407828.12780000000
137	FC-265	Reserved	428545.83700000000	5407828.12780000000
138	FC-247	Reserved	428530.83700000000	5407833.12780000000
139	FC-338	Reserved	428565.83700000000	5407803.12780000000
140	FC-374	Reserved	428550.83700000000	5407783.12780000000
141	FC-210	Reserved	428520.83700000000	5407843.12780000000
142	FC-376	Reserved	428560.83700000000	5407783.12780000000
143	FC-46	Reserved	428445.83700000000	5407883.12780000000
144	FC-150	Reserved	428530.83700000000	5407858.12780000000
145	FC-297	Reserved	428565.83700000000	5407818.12780000000
146	FC-50	Reserved	428465.83700000000	5407883.12780000000
147	FC-160	Reserved	428470.83700000000	5407853.12780000000
148	FC-132	Reserved	428440.83700000000	5407858.12780000000
149	FC-325	Reserved	428565.83700000000	5407808.12780000000
150	FC-8	Reserved	428460.83700000000	5407903.12780000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	BF-27	Surface	422928.66790000000	5401025.62100000000
2	BF-138	Surface	422873.66790000000	5400985.62100000000
3	BF-140	Surface	422883.66790000000	5400985.62100000000
4	BF-154	Surface	422878.66790000000	5400980.62100000000
5	BF-122	Surface	422873.66790000000	5400990.62100000000
6	BF-330	Surface	422813.66790000000	5400900.62100000000
7	BF-282	Surface	422828.66790000000	5400930.62100000000
8	BF-66	Surface	422913.66790000000	5401010.62100000000
9	BF-132	Surface	422923.66790000000	5400990.62100000000
10	BF-103	Surface	422938.66790000000	5401000.62100000000
11	BF-263	Surface	422858.66790000000	5400940.62100000000
12	BF-229	Surface	422883.66790000000	5400955.62100000000
13	BF-102	Surface	422933.66790000000	5401000.62100000000
14	BF-284	Surface	422838.66790000000	5400930.62100000000
15	BF-223	Surface	422853.66790000000	5400955.62100000000
16	BF-325	Surface	422818.66790000000	5400905.62100000000
17	BF-308	Surface	422853.66790000000	5400920.62100000000
18	BF-335	Surface	422818.66790000000	5400895.62100000000
19	BF-222	Surface	422848.66790000000	5400955.62100000000
20	BF-276	Surface	422858.66790000000	5400935.62100000000
21	BF-315	Surface	422843.66790000000	5400915.62100000000
22	BF-101	Surface	422928.66790000000	5401000.62100000000
23	BF-234	Surface	422843.66790000000	5400950.62100000000
24	BF-289	Surface	422863.66790000000	5400930.62100000000
25	BF-227	Surface	422873.66790000000	5400955.62100000000
26	BF-249	Surface	422853.66790000000	5400945.62100000000
27	BF-197	Surface	422868.66790000000	5400965.62100000000
28	BF-288	Surface	422858.66790000000	5400930.62100000000
29	BF-285	Surface	422843.66790000000	5400930.62100000000
30	BF-10	Surface	422933.66790000000	5401035.62100000000
31	BF-192	Surface	422918.66790000000	5400970.62100000000
32	BF-149	Surface	422928.66790000000	5400985.62100000000
33	BF-179	Surface	422853.66790000000	5400970.62100000000
34	BF-209	Surface	422853.66790000000	5400960.62100000000
35	BF-334	Surface	422813.66790000000	5400895.62100000000
36	BF-13	Surface	422948.66790000000	5401035.62100000000
37	BF-235	Surface	422848.66790000000	5400950.62100000000
38	BF-190	Surface	422908.66790000000	5400970.62100000000
39	BF-36	Surface	422913.66790000000	5401020.62100000000
40	BF-305	Surface	422838.66790000000	5400920.62100000000
41	BF-191	Surface	422913.66790000000	5400970.62100000000
42	BF-300	Surface	422813.66790000000	5400920.62100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	BF-199	Surface	422878.66790000000	5400965.62100000000
44	BF-172	Surface	422893.66790000000	5400975.62100000000
45	BF-218	Surface	422898.66790000000	5400960.62100000000
46	BF-327	Surface	422828.66790000000	5400905.62100000000
47	BF-241	Surface	422878.66790000000	5400950.62100000000
48	BF-126	Surface	422893.66790000000	5400990.62100000000
49	BF-215	Surface	422883.66790000000	5400960.62100000000
50	BF-137	Surface	422868.66790000000	5400985.62100000000
51	BF-48	Surface	422903.66790000000	5401015.62100000000
52	BF-251	Surface	422863.66790000000	5400945.62100000000
53	BF-304	Surface	422833.66790000000	5400920.62100000000
54	BF-45	Surface	422958.66790000000	5401020.62100000000
55	BF-326	Surface	422823.66790000000	5400905.62100000000
56	BF-253	Surface	422873.66790000000	5400945.62100000000
57	BF-296	Surface	422843.66790000000	5400925.62100000000
58	BF-133	Surface	422928.66790000000	5400990.62100000000
59	BF-239	Surface	422868.66790000000	5400950.62100000000
60	BF-322	Surface	422838.66790000000	5400910.62100000000
61	BF-28	Subsurface	422933.66790000000	5401025.62100000000
62	BF-185	Subsurface	422883.66790000000	5400970.62100000000
63	BF-11	Subsurface	422938.66790000000	5401035.62100000000
64	BF-275	Subsurface	422853.66790000000	5400935.62100000000
65	BF-41	Subsurface	422938.66790000000	5401020.62100000000
66	BF-231	Reserved	422893.66790000000	5400955.62100000000
67	BF-79	Reserved	422898.66790000000	5401005.62100000000
68	BF-250	Reserved	422858.66790000000	5400945.62100000000
69	BF-332	Reserved	422823.66790000000	5400900.62100000000
70	BF-206	Reserved	422913.66790000000	5400965.62100000000
71	BF-100	Reserved	422923.66790000000	5401000.62100000000
72	BF-22	Reserved	422953.66790000000	5401030.62100000000
73	BF-182	Reserved	422868.66790000000	5400970.62100000000
74	BF-93	Reserved	422888.66790000000	5401000.62100000000
75	BF-38	Reserved	422923.66790000000	5401020.62100000000
76	BF-181	Reserved	422863.66790000000	5400970.62100000000
77	BF-245	Reserved	422833.66790000000	5400945.62100000000
78	BF-53	Reserved	422928.66790000000	5401015.62100000000
79	BF-269	Reserved	422823.66790000000	5400935.62100000000
80	BF-5	Reserved	422938.66790000000	5401040.62100000000
81	BF-39	Reserved	422928.66790000000	5401020.62100000000
82	BF-342	Reserved	422793.66790000000	5400880.62100000000
83	BF-180	Reserved	422858.66790000000	5400970.62100000000
84	BF-55	Reserved	422938.66790000000	5401015.62100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	BF-204	Reserved	422903.66790000000	5400965.62100000000
86	BF-318	Reserved	422818.66790000000	5400910.62100000000
87	BF-193	Reserved	422848.66790000000	5400965.62100000000
88	BF-261	Reserved	422848.66790000000	5400940.62100000000
89	BF-321	Reserved	422833.66790000000	5400910.62100000000
90	BF-238	Reserved	422863.66790000000	5400950.62100000000
91	BF-75	Reserved	422958.66790000000	5401010.62100000000
92	BF-35	Reserved	422908.66790000000	5401020.62100000000
93	BF-125	Reserved	422888.66790000000	5400990.62100000000
94	BF-68	Reserved	422923.66790000000	5401010.62100000000
95	BF-153	Reserved	422873.66790000000	5400980.62100000000
96	BF-165	Reserved	422858.66790000000	5400975.62100000000
97	BF-1	Reserved	422933.66790000000	5401045.62100000000
98	BF-49	Reserved	422908.66790000000	5401015.62100000000
99	BF-214	Reserved	422878.66790000000	5400960.62100000000
100	BF-108	Reserved	422883.66790000000	5400995.62100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	EV-116	Surface	424976.53210000000	5394343.66890000000
2	EV-320	Surface	425086.53210000000	5394273.66890000000
3	EV-50	Surface	425036.53210000000	5394373.66890000000
4	EV-336	Surface	424986.53210000000	5394263.66890000000
5	EV-887	Surface	425156.53210000000	5394063.66890000000
6	EV-766	Surface	425116.53210000000	5394103.66890000000
7	EV-626	Surface	425056.53210000000	5394153.66890000000
8	EV-97	Surface	425056.53210000000	5394353.66890000000
9	EV-259	Surface	425016.53210000000	5394293.66890000000
10	EV-889	Surface	425176.53210000000	5394063.66890000000
11	EV-799	Surface	425166.53210000000	5394093.66890000000
12	EV-42	Surface	424956.53210000000	5394373.66890000000
13	EV-262	Surface	425046.53210000000	5394293.66890000000
14	EV-851	Surface	425106.53210000000	5394073.66890000000
15	EV-239	Surface	425086.53210000000	5394303.66890000000
16	EV-23	Surface	424946.53210000000	5394383.66890000000
17	EV-765	Surface	425106.53210000000	5394103.66890000000
18	EV-374	Surface	425106.53210000000	5394253.66890000000
19	EV-818	Surface	425076.53210000000	5394083.66890000000
20	EV-145	Surface	424976.53210000000	5394333.66890000000
21	EV-913	Surface	425096.53210000000	5394053.66890000000
22	EV-397	Surface	425076.53210000000	5394243.66890000000
23	EV-739	Surface	425116.53210000000	5394113.66890000000
24	EV-653	Surface	425066.53210000000	5394143.66890000000
25	EV-738	Surface	425106.53210000000	5394113.66890000000
26	EV-25	Surface	424966.53210000000	5394383.66890000000
27	EV-911	Surface	425076.53210000000	5394053.66890000000
28	EV-691	Surface	425176.53210000000	5394133.66890000000
29	EV-290	Surface	425056.53210000000	5394283.66890000000
30	EV-450	Surface	425096.53210000000	5394223.66890000000
31	EV-393	Surface	425036.53210000000	5394243.66890000000
32	EV-771	Surface	425166.53210000000	5394103.66890000000
33	EV-659	Surface	425126.53210000000	5394143.66890000000
34	EV-762	Surface	425076.53210000000	5394103.66890000000
35	EV-391	Surface	425016.53210000000	5394243.66890000000
36	EV-174	Surface	424986.53210000000	5394323.66890000000
37	EV-550	Surface	425076.53210000000	5394183.66890000000
38	EV-177	Surface	425016.53210000000	5394323.66890000000
39	EV-209	Surface	425056.53210000000	5394313.66890000000
40	EV-741	Surface	425136.53210000000	5394113.66890000000
41	EV-915	Surface	425116.53210000000	5394053.66890000000
42	EV-115	Surface	424966.53210000000	5394343.66890000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	EV-652	Surface	425056.53210000000	5394143.66890000000
44	EV-16	Surface	425016.53210000000	5394393.66890000000
45	EV-947	Surface	425126.53210000000	5394043.66890000000
46	EV-313	Surface	425016.53210000000	5394273.66890000000
47	EV-530	Surface	425126.53210000000	5394193.66890000000
48	EV-125	Surface	425066.53210000000	5394343.66890000000
49	EV-228	Surface	424976.53210000000	5394303.66890000000
50	EV-230	Surface	424996.53210000000	5394303.66890000000
51	EV-575	Surface	425066.53210000000	5394173.66890000000
52	EV-6	Surface	425026.53210000000	5394403.66890000000
53	EV-317	Surface	425056.53210000000	5394273.66890000000
54	EV-657	Surface	425106.53210000000	5394143.66890000000
55	EV-423	Surface	425076.53210000000	5394233.66890000000
56	EV-207	Surface	425036.53210000000	5394313.66890000000
57	EV-287	Surface	425026.53210000000	5394283.66890000000
58	EV-636	Surface	425156.53210000000	5394153.66890000000
59	EV-51	Surface	425046.53210000000	5394373.66890000000
60	EV-976	Surface	425096.53210000000	5394033.66890000000
61	EV-763	Subsurface	425086.53210000000	5394103.66890000000
62	EV-602	Subsurface	425076.53210000000	5394163.66890000000
63	EV-203	Subsurface	424996.53210000000	5394313.66890000000
64	EV-476	Subsurface	425096.53210000000	5394213.66890000000
65	EV-122	Subsurface	425036.53210000000	5394343.66890000000
66	EV-716	Reserved	425156.53210000000	5394123.66890000000
67	EV-447	Reserved	425066.53210000000	5394223.66890000000
68	EV-182	Reserved	425066.53210000000	5394323.66890000000
69	EV-9	Reserved	425056.53210000000	5394403.66890000000
70	EV-609	Reserved	425146.53210000000	5394163.66890000000
71	EV-35	Reserved	425066.53210000000	5394383.66890000000
72	EV-100	Reserved	425086.53210000000	5394353.66890000000
73	EV-687	Reserved	425136.53210000000	5394133.66890000000
74	EV-172	Reserved	424966.53210000000	5394323.66890000000
75	EV-236	Reserved	425056.53210000000	5394303.66890000000
76	EV-19	Reserved	425046.53210000000	5394393.66890000000
77	EV-683	Reserved	425096.53210000000	5394133.66890000000
78	EV-736	Reserved	425086.53210000000	5394113.66890000000
79	EV-173	Reserved	424976.53210000000	5394323.66890000000
80	EV-502	Reserved	425106.53210000000	5394203.66890000000
81	EV-310	Reserved	424986.53210000000	5394273.66890000000
82	EV-499	Reserved	425076.53210000000	5394203.66890000000
83	EV-346	Reserved	425086.53210000000	5394263.66890000000
84	EV-2	Reserved	425056.53210000000	5394413.66890000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	EV-442	Reserved	425016.53210000000	5394223.66890000000
86	EV-90	Reserved	424986.53210000000	5394353.66890000000
87	EV-849	Reserved	425086.53210000000	5394073.66890000000
88	EV-744	Reserved	425166.53210000000	5394113.66890000000
89	EV-171	Reserved	424956.53210000000	5394323.66890000000
90	EV-549	Reserved	425066.53210000000	5394183.66890000000
91	EV-715	Reserved	425146.53210000000	5394123.66890000000
92	EV-712	Reserved	425116.53210000000	5394123.66890000000
93	EV-791	Reserved	425086.53210000000	5394093.66890000000
94	EV-370	Reserved	425066.53210000000	5394253.66890000000
95	EV-452	Reserved	425116.53210000000	5394223.66890000000
96	EV-147	Reserved	424996.53210000000	5394333.66890000000
97	EV-916	Reserved	425126.53210000000	5394053.66890000000
98	EV-31	Reserved	425026.53210000000	5394383.66890000000
99	EV-830	Reserved	425196.53210000000	5394083.66890000000
100	EV-419	Reserved	425036.53210000000	5394233.66890000000
101	EV-34	Reserved	425056.53210000000	5394383.66890000000
102	EV-365	Reserved	425016.53210000000	5394253.66890000000
103	EV-120	Reserved	425016.53210000000	5394343.66890000000
104	EV-705	Reserved	425046.53210000000	5394123.66890000000
105	EV-48	Reserved	425016.53210000000	5394373.66890000000
106	EV-831	Reserved	425206.53210000000	5394083.66890000000
107	EV-206	Reserved	425026.53210000000	5394313.66890000000
108	EV-68	Reserved	425006.53210000000	5394363.66890000000
109	EV-449	Reserved	425086.53210000000	5394223.66890000000
110	EV-420	Reserved	425046.53210000000	5394233.66890000000
111	EV-316	Reserved	425046.53210000000	5394273.66890000000
112	EV-607	Reserved	425126.53210000000	5394163.66890000000
113	EV-396	Reserved	425066.53210000000	5394243.66890000000
114	EV-10	Reserved	425066.53210000000	5394403.66890000000
115	EV-794	Reserved	425116.53210000000	5394093.66890000000
116	EV-144	Reserved	424966.53210000000	5394333.66890000000
117	EV-146	Reserved	424986.53210000000	5394333.66890000000
118	EV-17	Reserved	425026.53210000000	5394393.66890000000
119	EV-212	Reserved	425086.53210000000	5394313.66890000000
120	EV-790	Reserved	425076.53210000000	5394093.66890000000
121	EV-797	Reserved	425146.53210000000	5394093.66890000000
122	EV-469	Reserved	425026.53210000000	5394213.66890000000
123	EV-631	Reserved	425106.53210000000	5394153.66890000000
124	EV-99	Reserved	425076.53210000000	5394353.66890000000
125	EV-266	Reserved	425086.53210000000	5394293.66890000000
126	EV-49	Reserved	425026.53210000000	5394373.66890000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	EV-286	Reserved	425016.53210000000	5394283.66890000000
128	EV-344	Reserved	425066.53210000000	5394263.66890000000
129	EV-426	Reserved	425106.53210000000	5394233.66890000000
130	EV-345	Reserved	425076.53210000000	5394263.66890000000
131	EV-265	Reserved	425076.53210000000	5394293.66890000000
132	EV-855	Reserved	425146.53210000000	5394073.66890000000
133	EV-603	Reserved	425086.53210000000	5394163.66890000000
134	EV-684	Reserved	425106.53210000000	5394133.66890000000
135	EV-740	Reserved	425126.53210000000	5394113.66890000000
136	EV-72	Reserved	425046.53210000000	5394363.66890000000
137	EV-312	Reserved	425006.53210000000	5394273.66890000000
138	EV-975	Reserved	425086.53210000000	5394033.66890000000
139	EV-231	Reserved	425006.53210000000	5394303.66890000000
140	EV-263	Reserved	425056.53210000000	5394293.66890000000
141	EV-96	Reserved	425046.53210000000	5394353.66890000000
142	EV-624	Reserved	425036.53210000000	5394153.66890000000
143	EV-113	Reserved	424946.53210000000	5394343.66890000000
144	EV-33	Reserved	425046.53210000000	5394383.66890000000
145	EV-912	Reserved	425086.53210000000	5394053.66890000000
146	EV-395	Reserved	425056.53210000000	5394243.66890000000
147	EV-581	Reserved	425126.53210000000	5394173.66890000000
148	EV-599	Reserved	425046.53210000000	5394163.66890000000
149	EV-372	Reserved	425086.53210000000	5394253.66890000000
150	EV-573	Reserved	425046.53210000000	5394173.66890000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	KL-102	Surface	418135.18120000000	5392188.44410000000
2	KL-119	Surface	418120.18120000000	5392183.44410000000
3	KL-18	Surface	418180.18120000000	5392223.44410000000
4	KL-33	Surface	418155.18120000000	5392213.44410000000
5	KL-110	Surface	418175.18120000000	5392188.44410000000
6	KL-20	Surface	418190.18120000000	5392223.44410000000
7	KL-74	Surface	418165.18120000000	5392198.44410000000
8	KL-122	Surface	418135.18120000000	5392183.44410000000
9	KL-155	Surface	418135.18120000000	5392173.44410000000
10	KL-36	Surface	418170.18120000000	5392213.44410000000
11	KL-139	Surface	418130.18120000000	5392178.44410000000
12	KL-156	Surface	418140.18120000000	5392173.44410000000
13	KL-93	Surface	418180.18120000000	5392193.44410000000
14	KL-129	Surface	418170.18120000000	5392183.44410000000
15	KL-158	Surface	418150.18120000000	5392173.44410000000
16	KL-97	Surface	418200.18120000000	5392193.44410000000
17	KL-134	Surface	418195.18120000000	5392183.44410000000
18	KL-80	Surface	418195.18120000000	5392198.44410000000
19	KL-107	Surface	418160.18120000000	5392188.44410000000
20	KL-148	Surface	418175.18120000000	5392178.44410000000
21	KL-132	Surface	418185.18120000000	5392183.44410000000
22	KL-31	Surface	418200.18120000000	5392218.44410000000
23	KL-114	Surface	418195.18120000000	5392188.44410000000
24	KL-79	Surface	418190.18120000000	5392198.44410000000
25	KL-152	Surface	418120.18120000000	5392173.44410000000
26	KL-19	Surface	418185.18120000000	5392223.44410000000
27	KL-57	Surface	418150.18120000000	5392203.44410000000
28	KL-53	Surface	418195.18120000000	5392208.44410000000
29	KL-15	Surface	418165.18120000000	5392223.44410000000
30	KL-104	Surface	418145.18120000000	5392188.44410000000
31	KL-115	Surface	418200.18120000000	5392188.44410000000
32	KL-14	Surface	418195.18120000000	5392228.44410000000
33	KL-127	Surface	418160.18120000000	5392183.44410000000
34	KL-4	Surface	418190.18120000000	5392238.44410000000
35	KL-121	Surface	418130.18120000000	5392183.44410000000
36	KL-77	Reserved	418180.18120000000	5392198.44410000000
37	KL-69	Subsurface	418140.18120000000	5392198.44410000000
38	KL-140	Subsurface	418135.18120000000	5392178.44410000000
39	KL-23	Subsurface	418160.18120000000	5392218.44410000000
40	KL-45	Subsurface	418155.18120000000	5392208.44410000000
41	KL-47	Subsurface	418165.18120000000	5392208.44410000000
43	KL-141	Reserved	418140.18120000000	5392178.44410000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
44	KL-32	Reserved	418150.18120000000	5392213.44410000000
45	KL-3	Reserved	418185.18120000000	5392238.44410000000
46	KL-5	Reserved	418195.18120000000	5392238.44410000000
47	KL-28	Reserved	418185.18120000000	5392218.44410000000
48	KL-51	Reserved	418185.18120000000	5392208.44410000000
49	KL-92	Reserved	418175.18120000000	5392193.44410000000
50	KL-46	Reserved	418160.18120000000	5392208.44410000000
51	KL-62	Reserved	418175.18120000000	5392203.44410000000
52	KL-65	Reserved	418190.18120000000	5392203.44410000000
53	KL-108	Reserved	418165.18120000000	5392188.44410000000
54	KL-63	Reserved	418180.18120000000	5392203.44410000000
55	KL-56	Reserved	418145.18120000000	5392203.44410000000
56	KL-161	Reserved	418110.18120000000	5392168.44410000000
57	KL-143	Reserved	418150.18120000000	5392178.44410000000
58	KL-82	Reserved	418125.18120000000	5392193.44410000000
59	KL-35	Reserved	418165.18120000000	5392213.44410000000
60	KL-151	Reserved	418115.18120000000	5392173.44410000000
61	KL-75	Reserved	418170.18120000000	5392198.44410000000
62	KL-76	Reserved	418175.18120000000	5392198.44410000000
63	KL-2	Reserved	418195.18120000000	5392243.44410000000
64	KL-73	Reserved	418160.18120000000	5392198.44410000000
65	KL-160	Reserved	418160.18120000000	5392173.44410000000
66	KL-144	Reserved	418155.18120000000	5392178.44410000000
67	KL-117	Reserved	418110.18120000000	5392183.44410000000
68	KL-42	Reserved	418200.18120000000	5392213.44410000000
69	KL-55	Reserved	418140.18120000000	5392203.44410000000
70	KL-27	Reserved	418180.18120000000	5392218.44410000000
71	KL-16	Reserved	418170.18120000000	5392223.44410000000
72	KL-145	Reserved	418160.18120000000	5392178.44410000000
73	KL-49	Reserved	418175.18120000000	5392208.44410000000
74	KL-91	Reserved	418170.18120000000	5392193.44410000000
75	KL-130	Reserved	418175.18120000000	5392183.44410000000
76	KL-22	Reserved	418200.18120000000	5392223.44410000000
77	KL-164	Reserved	418125.18120000000	5392168.44410000000
78	KL-26	Reserved	418175.18120000000	5392218.44410000000
79	KL-52	Reserved	418190.18120000000	5392208.44410000000
80	KL-87	Reserved	418150.18120000000	5392193.44410000000
81	KL-67	Reserved	418200.18120000000	5392203.44410000000
82	KL-116	Reserved	418105.18120000000	5392183.44410000000
83	KL-94	Reserved	418185.18120000000	5392193.44410000000
84	KL-124	Reserved	418145.18120000000	5392183.44410000000
85	KL-25	Reserved	418170.18120000000	5392218.44410000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
86	KL-34	Reserved	418160.18120000000	5392213.44410000000
87	KL-112	Reserved	418185.18120000000	5392188.44410000000
88	KL-96	Reserved	418195.18120000000	5392193.44410000000
89	KL-29	Reserved	418190.18120000000	5392218.44410000000
90	KL-154	Reserved	418130.18120000000	5392173.44410000000
91	KL-125	Reserved	418150.18120000000	5392183.44410000000
92	KL-44	Reserved	418150.18120000000	5392208.44410000000
93	KL-113	Reserved	418190.18120000000	5392188.44410000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	WB-394	Surface	420692.77070000000	5386741.98970000000
2	WB-641	Surface	420682.77070000000	5386581.98970000000
3	WB-99	Surface	420452.77070000000	5386901.98970000000
4	WB-256	Surface	420642.77070000000	5386821.98970000000
5	WB-180	Surface	420512.77070000000	5386861.98970000000
6	WB-11	Surface	420432.77070000000	5386961.98970000000
7	WB-20	Surface	420432.77070000000	5386951.98970000000
8	WB-621	Surface	420802.77070000000	5386611.98970000000
9	WB-202	Surface	420542.77070000000	5386851.98970000000
10	WB-74	Surface	420552.77070000000	5386921.98970000000
11	WB-285	Surface	420642.77070000000	5386801.98970000000
12	WB-629	Surface	420752.77070000000	5386601.98970000000
13	WB-592	Surface	420822.77070000000	5386631.98970000000
14	WB-458	Surface	420652.77070000000	5386701.98970000000
15	WB-551	Surface	420742.77070000000	5386651.98970000000
16	WB-343	Surface	420722.77070000000	5386771.98970000000
17	WB-53	Surface	420502.77070000000	5386931.98970000000
18	WB-497	Surface	420722.77070000000	5386681.98970000000
19	WB-65	Surface	420462.77070000000	5386921.98970000000
20	WB-440	Surface	420642.77070000000	5386711.98970000000
21	WB-55	Surface	420522.77070000000	5386931.98970000000
22	WB-431	Surface	420722.77070000000	5386721.98970000000
23	WB-614	Surface	420732.77070000000	5386611.98970000000
24	WB-533	Surface	420722.77070000000	5386661.98970000000
25	WB-651	Surface	420702.77070000000	5386571.98970000000
26	WB-144	Surface	420532.77070000000	5386881.98970000000
27	WB-454	Surface	420782.77070000000	5386711.98970000000
28	WB-291	Surface	420702.77070000000	5386801.98970000000
29	WB-399	Surface	420742.77070000000	5386741.98970000000
30	WB-27	Surface	420502.77070000000	5386951.98970000000
31	WB-253	Surface	420612.77070000000	5386821.98970000000
32	WB-69	Surface	420502.77070000000	5386921.98970000000
33	WB-428	Surface	420692.77070000000	5386721.98970000000
34	WB-61	Surface	420422.77070000000	5386921.98970000000
35	WB-620	Surface	420792.77070000000	5386611.98970000000
36	WB-374	Surface	420672.77070000000	5386751.98970000000
37	WB-59	Surface	420402.77070000000	5386921.98970000000
38	WB-339	Surface	420682.77070000000	5386771.98970000000
39	WB-477	Surface	420682.77070000000	5386691.98970000000
40	WB-213	Surface	420652.77070000000	5386851.98970000000
41	WB-526	Surface	420652.77070000000	5386661.98970000000
42	WB-482	Surface	420732.77070000000	5386691.98970000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	WB-191	Surface	420622.77070000000	5386861.98970000000
44	WB-157	Surface	420472.77070000000	5386871.98970000000
45	WB-308	Surface	420712.77070000000	5386791.98970000000
46	WB-494	Surface	420692.77070000000	5386681.98970000000
47	WB-276	Surface	420702.77070000000	5386811.98970000000
48	WB-356	Surface	420672.77070000000	5386761.98970000000
49	WB-473	Surface	420642.77070000000	5386691.98970000000
50	WB-500	Surface	420752.77070000000	5386681.98970000000
51	WB-244	Surface	420662.77070000000	5386831.98970000000
52	WB-10	Surface	420422.77070000000	5386961.98970000000
53	WB-336	Surface	420652.77070000000	5386771.98970000000
54	WB-613	Surface	420722.77070000000	5386611.98970000000
55	WB-267	Surface	420612.77070000000	5386811.98970000000
56	WB-306	Surface	420692.77070000000	5386791.98970000000
57	WB-517	Surface	420742.77070000000	5386671.98970000000
58	WB-361	Surface	420722.77070000000	5386761.98970000000
59	WB-354	Surface	420652.77070000000	5386761.98970000000
60	WB-249	Surface	420572.77070000000	5386821.98970000000
61	WB-210	Subsurface	420622.77070000000	5386851.98970000000
62	WB-175	Subsurface	420462.77070000000	5386861.98970000000
63	WB-376	Subsurface	420692.77070000000	5386751.98970000000
64	WB-626	Subsurface	420722.77070000000	5386601.98970000000
65	WB-618	Subsurface	420772.77070000000	5386611.98970000000
66	WB-504	Reserved	420792.77070000000	5386681.98970000000
67	WB-218	Reserved	420542.77070000000	5386841.98970000000
68	WB-124	Reserved	420522.77070000000	5386891.98970000000
69	WB-547	Reserved	420702.77070000000	5386651.98970000000
70	WB-319	Reserved	420652.77070000000	5386781.98970000000
71	WB-154	Reserved	420442.77070000000	5386871.98970000000
72	WB-313	Reserved	420592.77070000000	5386781.98970000000
73	WB-141	Reserved	420502.77070000000	5386881.98970000000
74	WB-538	Reserved	420772.77070000000	5386661.98970000000
75	WB-4	Reserved	420472.77070000000	5386981.98970000000
76	WB-122	Reserved	420502.77070000000	5386891.98970000000
77	WB-182	Reserved	420532.77070000000	5386861.98970000000
78	WB-208	Reserved	420602.77070000000	5386851.98970000000
79	WB-468	Reserved	420752.77070000000	5386701.98970000000
80	WB-451	Reserved	420752.77070000000	5386711.98970000000
81	WB-148	Reserved	420572.77070000000	5386881.98970000000
82	WB-251	Reserved	420592.77070000000	5386821.98970000000
83	WB-9	Reserved	420482.77070000000	5386971.98970000000
84	WB-341	Reserved	420702.77070000000	5386771.98970000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	WB-503	Reserved	420782.77070000000	5386681.98970000000
86	WB-7	Reserved	420462.77070000000	5386971.98970000000
87	WB-479	Reserved	420702.77070000000	5386691.98970000000
88	WB-562	Reserved	420682.77070000000	5386641.98970000000
89	WB-426	Reserved	420672.77070000000	5386721.98970000000
90	WB-605	Reserved	420792.77070000000	5386621.98970000000
91	WB-337	Reserved	420662.77070000000	5386771.98970000000
92	WB-128	Reserved	420562.77070000000	5386891.98970000000
93	WB-445	Reserved	420692.77070000000	5386711.98970000000
94	WB-559	Reserved	420822.77070000000	5386651.98970000000
95	WB-645	Reserved	420722.77070000000	5386581.98970000000
96	WB-240	Reserved	420622.77070000000	5386831.98970000000
97	WB-490	Reserved	420652.77070000000	5386681.98970000000
98	WB-89	Reserved	420532.77070000000	5386911.98970000000
99	WB-570	Reserved	420762.77070000000	5386641.98970000000
100	WB-432	Reserved	420732.77070000000	5386721.98970000000
101	WB-177	Reserved	420482.77070000000	5386861.98970000000
102	WB-387	Reserved	420622.77070000000	5386741.98970000000
103	WB-403	Reserved	420612.77070000000	5386731.98970000000
104	WB-201	Reserved	420532.77070000000	5386851.98970000000
105	WB-565	Reserved	420712.77070000000	5386641.98970000000
106	WB-333	Reserved	420622.77070000000	5386771.98970000000
107	WB-80	Reserved	420442.77070000000	5386911.98970000000
108	WB-137	Reserved	420462.77070000000	5386881.98970000000
109	WB-77	Reserved	420412.77070000000	5386911.98970000000
110	WB-36	Reserved	420472.77070000000	5386941.98970000000
111	WB-489	Reserved	420802.77070000000	5386691.98970000000
112	WB-573	Reserved	420792.77070000000	5386641.98970000000
113	WB-590	Reserved	420802.77070000000	5386631.98970000000
114	WB-524	Reserved	420812.77070000000	5386671.98970000000
115	WB-367	Reserved	420602.77070000000	5386751.98970000000
116	WB-366	Reserved	420592.77070000000	5386751.98970000000
117	WB-392	Reserved	420672.77070000000	5386741.98970000000
118	WB-360	Reserved	420712.77070000000	5386761.98970000000
119	WB-602	Reserved	420762.77070000000	5386621.98970000000
120	WB-569	Reserved	420752.77070000000	5386641.98970000000
121	WB-574	Reserved	420802.77070000000	5386641.98970000000
122	WB-314	Reserved	420602.77070000000	5386781.98970000000
123	WB-95	Reserved	420412.77070000000	5386901.98970000000
124	WB-187	Reserved	420582.77070000000	5386861.98970000000
125	WB-288	Reserved	420672.77070000000	5386801.98970000000
126	WB-266	Reserved	420602.77070000000	5386811.98970000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	WB-417	Reserved	420752.77070000000	5386731.98970000000
128	WB-178	Reserved	420492.77070000000	5386861.98970000000
129	WB-223	Reserved	420592.77070000000	5386841.98970000000
130	WB-241	Reserved	420632.77070000000	5386831.98970000000
131	WB-34	Reserved	420452.77070000000	5386941.98970000000
132	WB-250	Reserved	420582.77070000000	5386821.98970000000
133	WB-132	Reserved	420602.77070000000	5386891.98970000000
134	WB-315	Reserved	420612.77070000000	5386781.98970000000
135	WB-580	Reserved	420702.77070000000	5386631.98970000000
136	WB-483	Reserved	420742.77070000000	5386691.98970000000
137	WB-646	Reserved	420652.77070000000	5386571.98970000000
138	WB-654	Reserved	420652.77070000000	5386561.98970000000
139	WB-101	Reserved	420472.77070000000	5386901.98970000000
140	WB-471	Reserved	420782.77070000000	5386701.98970000000
141	WB-505	Reserved	420802.77070000000	5386681.98970000000
142	WB-406	Reserved	420642.77070000000	5386731.98970000000
143	WB-352	Reserved	420632.77070000000	5386761.98970000000
144	WB-647	Reserved	420662.77070000000	5386571.98970000000
145	WB-659	Reserved	420642.77070000000	5386551.98970000000
146	WB-92	Reserved	420562.77070000000	5386911.98970000000
147	WB-347	Reserved	420582.77070000000	5386761.98970000000
148	WB-369	Reserved	420622.77070000000	5386751.98970000000
149	WB-539	Reserved	420782.77070000000	5386661.98970000000
150	WB-131	Reserved	420592.77070000000	5386891.98970000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	KF-187	Surface	417115.60740000000	5382585.47000000000
2	KF-107	Surface	417110.60740000000	5382635.47000000000
3	KF-183	Surface	417135.60740000000	5382590.47000000000
4	KF-56	Surface	417110.60740000000	5382670.47000000000
5	KF-53	Surface	417135.60740000000	5382675.47000000000
6	KF-205	Surface	417135.60740000000	5382575.47000000000
7	KF-119	Surface	417135.60740000000	5382630.47000000000
8	KF-135	Surface	417135.60740000000	5382620.47000000000
9	KF-237	Surface	417135.60740000000	5382555.47000000000
10	KF-209	Surface	417155.60740000000	5382575.47000000000
11	KF-2	Surface	417110.60740000000	5382705.47000000000
12	KF-108	Surface	417115.60740000000	5382635.47000000000
13	KF-5	Surface	417125.60740000000	5382705.47000000000
14	KF-155	Surface	417115.60740000000	5382605.47000000000
15	KF-243	Surface	417125.60740000000	5382550.47000000000
16	KF-203	Surface	417125.60740000000	5382575.47000000000
17	KF-67	Surface	417125.60740000000	5382665.47000000000
18	KF-224	Surface	417150.60740000000	5382565.47000000000
19	KF-65	Surface	417115.60740000000	5382665.47000000000
20	KF-207	Surface	417145.60740000000	5382575.47000000000
21	KF-206	Surface	417140.60740000000	5382575.47000000000
22	KF-152	Surface	417140.60740000000	5382610.47000000000
23	KF-23	Surface	417105.60740000000	5382690.47000000000
24	KF-158	Surface	417130.60740000000	5382605.47000000000
25	KF-196	Surface	417125.60740000000	5382580.47000000000
26	KF-211	Surface	417125.60740000000	5382570.47000000000
27	KF-82	Surface	417125.60740000000	5382655.47000000000
28	KF-102	Surface	417120.60740000000	5382640.47000000000
29	KF-38	Surface	417140.60740000000	5382685.47000000000
30	KF-221	Surface	417135.60740000000	5382565.47000000000
31	KF-26	Surface	417120.60740000000	5382690.47000000000
32	KF-164	Surface	417120.60740000000	5382600.47000000000
33	KF-8	Surface	417110.60740000000	5382700.47000000000
34	KF-175	Surface	417135.60740000000	5382595.47000000000
35	KF-138	Surface	417110.60740000000	5382615.47000000000
36	KF-163	Surface	417115.60740000000	5382600.47000000000
37	KF-24	Surface	417110.60740000000	5382690.47000000000
38	KF-141	Surface	417125.60740000000	5382615.47000000000
39	KF-13	Surface	417135.60740000000	5382700.47000000000
40	KF-73	Surface	417115.60740000000	5382660.47000000000
41	KF-80	Surface	417115.60740000000	5382655.47000000000
42	KF-226	Surface	417120.60740000000	5382560.47000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	KF-81	Surface	417120.60740000000	5382655.47000000000
44	KF-245	Surface	417135.60740000000	5382550.47000000000
45	KF-222	Surface	417140.60740000000	5382565.47000000000
46	KF-103	Surface	417125.60740000000	5382640.47000000000
47	KF-58	Surface	417120.60740000000	5382670.47000000000
48	KF-19	Surface	417125.60740000000	5382695.47000000000
49	KF-112	Surface	417135.60740000000	5382635.47000000000
50	KF-147	Surface	417115.60740000000	5382610.47000000000
51	KF-120	Surface	417140.60740000000	5382630.47000000000
52	KF-59	Surface	417125.60740000000	5382670.47000000000
53	KF-116	Surface	417120.60740000000	5382630.47000000000
54	KF-55	Surface	417105.60740000000	5382670.47000000000
55	KF-181	Surface	417125.60740000000	5382590.47000000000
56	KF-75	Surface	417125.60740000000	5382660.47000000000
57	KF-16	Surface	417110.60740000000	5382695.47000000000
58	KF-90	Surface	417130.60740000000	5382650.47000000000
59	KF-233	Surface	417155.60740000000	5382560.47000000000
60	KF-61	Surface	417135.60740000000	5382670.47000000000
61	KF-212	Subsurface	417130.60740000000	5382570.47000000000
62	KF-97	Subsurface	417130.60740000000	5382645.47000000000
63	KF-220	Subsurface	417130.60740000000	5382565.47000000000
64	KF-117	Subsurface	417125.60740000000	5382630.47000000000
65	KF-49	Subsurface	417115.60740000000	5382675.47000000000
66	KF-131	Reserved	417115.60740000000	5382620.47000000000
67	KF-25	Reserved	417115.60740000000	5382690.47000000000
68	KF-71	Reserved	417105.60740000000	5382660.47000000000
69	KF-176	Reserved	417140.60740000000	5382595.47000000000
70	KF-92	Reserved	417140.60740000000	5382650.47000000000
71	KF-197	Reserved	417130.60740000000	5382580.47000000000
72	KF-182	Reserved	417130.60740000000	5382590.47000000000
73	KF-201	Reserved	417150.60740000000	5382580.47000000000
74	KF-195	Reserved	417120.60740000000	5382580.47000000000
75	KF-93	Reserved	417110.60740000000	5382645.47000000000
76	KF-144	Reserved	417140.60740000000	5382615.47000000000
77	KF-218	Reserved	417120.60740000000	5382565.47000000000
78	KF-44	Reserved	417130.60740000000	5382680.47000000000
79	KF-208	Reserved	417150.60740000000	5382575.47000000000
80	KF-130	Reserved	417110.60740000000	5382620.47000000000
81	KF-54	Reserved	417140.60740000000	5382675.47000000000
82	KF-172	Reserved	417120.60740000000	5382595.47000000000
83	KF-174	Reserved	417130.60740000000	5382595.47000000000
84	KF-199	Reserved	417140.60740000000	5382580.47000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	KF-192	Reserved	417140.60740000000	5382585.47000000000
86	KF-1	Reserved	417105.60740000000	5382705.47000000000
87	KF-34	Reserved	417120.60740000000	5382685.47000000000
88	KF-234	Reserved	417120.60740000000	5382555.47000000000
89	KF-159	Reserved	417135.60740000000	5382605.47000000000
90	KF-22	Reserved	417140.60740000000	5382695.47000000000
91	KF-28	Reserved	417130.60740000000	5382690.47000000000
92	KF-151	Reserved	417135.60740000000	5382610.47000000000
93	KF-21	Reserved	417135.60740000000	5382695.47000000000
94	KF-123	Reserved	417115.60740000000	5382625.47000000000
95	KF-30	Reserved	417140.60740000000	5382690.47000000000
96	KF-60	Reserved	417130.60740000000	5382670.47000000000
97	KF-171	Reserved	417115.60740000000	5382595.47000000000
98	KF-153	Reserved	417145.60740000000	5382610.47000000000
99	KF-241	Reserved	417155.60740000000	5382555.47000000000
100	KF-27	Reserved	417125.60740000000	5382690.47000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	LY-475	Surface	417411.88240000000	5381448.97840000000
2	LY-297	Surface	417261.88240000000	5381508.97840000000
3	LY-935	Surface	417351.88240000000	5381238.97840000000
4	LY-507	Surface	417241.88240000000	5381428.97840000000
5	LY-468	Surface	417341.88240000000	5381448.97840000000
6	LY-485	Surface	417261.88240000000	5381438.97840000000
7	LY-132	Surface	417411.88240000000	5381568.97840000000
8	LY-704	Surface	417341.88240000000	5381338.97840000000
9	LY-384	Surface	417271.88240000000	5381478.97840000000
10	LY-561	Surface	417321.88240000000	5381408.97840000000
11	LY-709	Surface	417391.88240000000	5381338.97840000000
12	LY-53	Surface	417191.88240000000	5381588.97840000000
13	LY-441	Surface	417321.88240000000	5381458.97840000000
14	LY-999	Surface	417461.88240000000	5381198.97840000000
15	LY-1020	Surface	417461.88240000000	5381178.97840000000
16	LY-877	Surface	417461.88240000000	5381268.97840000000
17	LY-410	Surface	417271.88240000000	5381468.97840000000
18	LY-420	Surface	417371.88240000000	5381468.97840000000
19	LY-761	Surface	417451.88240000000	5381318.97840000000
20	LY-439	Surface	417301.88240000000	5381458.97840000000
21	LY-304	Surface	417331.88240000000	5381508.97840000000
22	LY-988	Surface	417451.88240000000	5381208.97840000000
23	LY-698	Surface	417281.88240000000	5381338.97840000000
24	LY-227	Surface	417171.88240000000	5381528.97840000000
25	LY-257	Surface	417161.88240000000	5381518.97840000000
26	LY-235	Surface	417251.88240000000	5381528.97840000000
27	LY-572	Surface	417221.88240000000	5381398.97840000000
28	LY-580	Surface	417301.88240000000	5381398.97840000000
29	LY-677	Surface	417291.88240000000	5381348.97840000000
30	LY-212	Surface	417331.88240000000	5381538.97840000000
31	LY-418	Surface	417351.88240000000	5381468.97840000000
32	LY-873	Surface	417421.88240000000	5381268.97840000000
33	LY-519	Surface	417361.88240000000	5381428.97840000000
34	LY-909	Surface	417321.88240000000	5381248.97840000000
35	LY-92	Surface	417301.88240000000	5381578.97840000000
36	LY-50	Surface	417161.88240000000	5381588.97840000000
37	LY-112	Surface	417211.88240000000	5381568.97840000000
38	LY-322	Surface	417211.88240000000	5381498.97840000000
39	LY-48	Surface	417141.88240000000	5381588.97840000000
40	LY-543	Surface	417361.88240000000	5381418.97840000000
41	LY-1053	Surface	417521.88240000000	5381148.97840000000
42	LY-157	Surface	417361.88240000000	5381558.97840000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	LY-309	Surface	417381.88240000000	5381508.97840000000
44	LY-742	Surface	417261.88240000000	5381318.97840000000
45	LY-996	Surface	417531.88240000000	5381208.97840000000
46	LY-35	Surface	417291.88240000000	5381598.97840000000
47	LY-741	Surface	417251.88240000000	5381318.97840000000
48	LY-582	Surface	417321.88240000000	5381398.97840000000
49	LY-495	Surface	417361.88240000000	5381438.97840000000
50	LY-520	Surface	417371.88240000000	5381428.97840000000
51	LY-542	Surface	417351.88240000000	5381418.97840000000
52	LY-927	Surface	417501.88240000000	5381248.97840000000
53	LY-458	Surface	417241.88240000000	5381448.97840000000
54	LY-1035	Surface	417501.88240000000	5381168.97840000000
55	LY-120	Surface	417291.88240000000	5381568.97840000000
56	LY-85	Surface	417231.88240000000	5381578.97840000000
57	LY-1004	Surface	417511.88240000000	5381198.97840000000
58	LY-271	Surface	417301.88240000000	5381518.97840000000
59	LY-61	Surface	417271.88240000000	5381588.97840000000
60	LY-127	Surface	417361.88240000000	5381568.97840000000
61	LY-514	Subsurface	417311.88240000000	5381428.97840000000
62	LY-1014	Subsurface	417511.88240000000	5381188.97840000000
63	LY-315	Subsurface	417141.88240000000	5381498.97840000000
64	LY-716	Subsurface	417461.88240000000	5381338.97840000000
65	LY-312	Subsurface	417411.88240000000	5381508.97840000000
66	LY-394	Reserved	417371.88240000000	5381478.97840000000
67	LY-770	Reserved	417311.88240000000	5381308.97840000000
68	LY-658	Reserved	417281.88240000000	5381358.97840000000
69	LY-46	Reserved	417401.88240000000	5381598.97840000000
70	LY-625	Reserved	417341.88240000000	5381378.97840000000
71	LY-980	Reserved	417471.88240000000	5381218.97840000000
72	LY-792	Reserved	417301.88240000000	5381298.97840000000
73	LY-754	Reserved	417381.88240000000	5381318.97840000000
74	LY-806	Reserved	417441.88240000000	5381298.97840000000
75	LY-229	Reserved	417191.88240000000	5381528.97840000000
76	LY-726	Reserved	417331.88240000000	5381328.97840000000
77	LY-721	Reserved	417281.88240000000	5381328.97840000000
78	LY-779	Reserved	417401.88240000000	5381308.97840000000
79	LY-947	Reserved	417471.88240000000	5381238.97840000000
80	LY-133	Reserved	417421.88240000000	5381568.97840000000
81	LY-208	Reserved	417291.88240000000	5381538.97840000000
82	LY-899	Reserved	417451.88240000000	5381258.97840000000
83	LY-783	Reserved	417441.88240000000	5381308.97840000000
84	LY-287	Reserved	417161.88240000000	5381508.97840000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	LY-1050	Reserved	417491.88240000000	5381148.97840000000
86	LY-25	Reserved	417391.88240000000	5381608.97840000000
87	LY-843	Reserved	417351.88240000000	5381278.97840000000
88	LY-571	Reserved	417421.88240000000	5381408.97840000000
89	LY-129	Reserved	417381.88240000000	5381568.97840000000
90	LY-105	Reserved	417141.88240000000	5381568.97840000000
91	LY-423	Reserved	417401.88240000000	5381468.97840000000
92	LY-526	Reserved	417431.88240000000	5381428.97840000000
93	LY-194	Reserved	417151.88240000000	5381538.97840000000
94	LY-400	Reserved	417171.88240000000	5381468.97840000000
95	LY-451	Reserved	417421.88240000000	5381458.97840000000
96	LY-88	Reserved	417261.88240000000	5381578.97840000000
97	LY-692	Reserved	417441.88240000000	5381348.97840000000
98	LY-524	Reserved	417411.88240000000	5381428.97840000000
99	LY-853	Reserved	417451.88240000000	5381278.97840000000
100	LY-82	Reserved	417201.88240000000	5381578.97840000000
101	LY-579	Reserved	417291.88240000000	5381398.97840000000
102	LY-479	Reserved	417201.88240000000	5381438.97840000000
103	LY-302	Reserved	417311.88240000000	5381508.97840000000
104	LY-821	Reserved	417361.88240000000	5381288.97840000000
105	LY-310	Reserved	417391.88240000000	5381508.97840000000
106	LY-1063	Reserved	417501.88240000000	5381128.97840000000
107	LY-510	Reserved	417271.88240000000	5381428.97840000000
108	LY-973	Reserved	417501.88240000000	5381228.97840000000
109	LY-969	Reserved	417461.88240000000	5381228.97840000000
110	LY-183	Reserved	417331.88240000000	5381548.97840000000
111	LY-86	Reserved	417241.88240000000	5381578.97840000000
112	LY-1037	Reserved	417521.88240000000	5381168.97840000000
113	LY-395	Reserved	417381.88240000000	5381478.97840000000
114	LY-145	Reserved	417241.88240000000	5381558.97840000000
115	LY-453	Reserved	417191.88240000000	5381448.97840000000
116	LY-565	Reserved	417361.88240000000	5381408.97840000000
117	LY-252	Reserved	417421.88240000000	5381528.97840000000
118	LY-262	Reserved	417211.88240000000	5381518.97840000000
119	LY-234	Reserved	417241.88240000000	5381528.97840000000
120	LY-1048	Reserved	417541.88240000000	5381158.97840000000
121	LY-604	Reserved	417331.88240000000	5381388.97840000000
122	LY-436	Reserved	417271.88240000000	5381458.97840000000
123	LY-631	Reserved	417401.88240000000	5381378.97840000000
124	LY-612	Reserved	417411.88240000000	5381388.97840000000
125	LY-23	Reserved	417371.88240000000	5381608.97840000000
126	LY-676	Reserved	417281.88240000000	5381348.97840000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	LY-333	Reserved	417321.88240000000	5381498.97840000000
128	LY-505	Reserved	417221.88240000000	5381428.97840000000
129	LY-361	Reserved	417311.88240000000	5381488.97840000000
130	LY-916	Reserved	417391.88240000000	5381248.97840000000
131	LY-382	Reserved	417251.88240000000	5381478.97840000000
132	LY-369	Reserved	417391.88240000000	5381488.97840000000
133	LY-922	Reserved	417451.88240000000	5381248.97840000000
134	LY-64	Reserved	417301.88240000000	5381588.97840000000
135	LY-712	Reserved	417421.88240000000	5381338.97840000000
136	LY-1057	Reserved	417491.88240000000	5381138.97840000000
137	LY-568	Reserved	417391.88240000000	5381408.97840000000
138	LY-584	Reserved	417341.88240000000	5381398.97840000000
139	LY-109	Reserved	417181.88240000000	5381568.97840000000
140	LY-330	Reserved	417291.88240000000	5381498.97840000000
141	LY-987	Reserved	417441.88240000000	5381208.97840000000
142	LY-566	Reserved	417371.88240000000	5381408.97840000000
143	LY-850	Reserved	417421.88240000000	5381278.97840000000
144	LY-539	Reserved	417321.88240000000	5381418.97840000000
145	LY-824	Reserved	417391.88240000000	5381288.97840000000
146	LY-4	Reserved	417321.88240000000	5381618.97840000000
147	LY-660	Reserved	417301.88240000000	5381358.97840000000
148	LY-578	Reserved	417281.88240000000	5381398.97840000000
149	LY-493	Reserved	417341.88240000000	5381438.97840000000
150	LY-841	Reserved	417331.88240000000	5381278.97840000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	CF-285	Surface	417379.96660000000	5380263.91170000000
2	CF-770	Surface	417709.96660000000	5380163.91170000000
3	CF-696	Surface	417409.96660000000	5380173.91170000000
4	CF-143	Surface	417409.96660000000	5380293.91170000000
5	CF-351	Surface	417569.96660000000	5380253.91170000000
6	CF-580	Surface	417569.96660000000	5380203.91170000000
7	CF-447	Surface	417599.96660000000	5380233.91170000000
8	CF-440	Surface	417529.96660000000	5380233.91170000000
9	CF-24	Surface	417599.96660000000	5380333.91170000000
10	CF-133	Surface	417769.96660000000	5380303.91170000000
11	CF-1037	Surface	417619.96660000000	5380093.91170000000
12	CF-122	Surface	417659.96660000000	5380303.91170000000
13	CF-56	Surface	417679.96660000000	5380323.91170000000
14	CF-948	Surface	417359.96660000000	5380113.91170000000
15	CF-364	Surface	417699.96660000000	5380253.91170000000
16	CF-282	Surface	417349.96660000000	5380263.91170000000
17	CF-155	Surface	417549.96660000000	5380293.91170000000
18	CF-269	Surface	417699.96660000000	5380273.91170000000
19	CF-673	Surface	417619.96660000000	5380183.91170000000
20	CF-588	Surface	417649.96660000000	5380203.91170000000
21	CF-48	Surface	417599.96660000000	5380323.91170000000
22	CF-540	Surface	417619.96660000000	5380213.91170000000
23	CF-251	Surface	417519.96660000000	5380273.91170000000
24	CF-953	Surface	417409.96660000000	5380113.91170000000
25	CF-852	Surface	417669.96660000000	5380143.91170000000
26	CF-96	Surface	417779.96660000000	5380313.91170000000
27	CF-185	Surface	417349.96660000000	5380283.91170000000
28	CF-314	Surface	417669.96660000000	5380263.91170000000
29	CF-292	Surface	417449.96660000000	5380263.91170000000
30	CF-1057	Surface	417709.96660000000	5380083.91170000000
31	CF-800	Surface	417579.96660000000	5380153.91170000000
32	CF-909	Surface	417389.96660000000	5380123.91170000000
33	CF-929	Surface	417589.96660000000	5380123.91170000000
34	CF-544	Surface	417659.96660000000	5380213.91170000000
35	CF-502	Surface	417689.96660000000	5380223.91170000000
36	CF-209	Surface	417589.96660000000	5380283.91170000000
37	CF-684	Surface	417729.96660000000	5380183.91170000000
38	CF-136	Surface	417799.96660000000	5380303.91170000000
39	CF-140	Surface	417339.96660000000	5380293.91170000000
40	CF-1005	Surface	417509.96660000000	5380103.91170000000
41	CF-476	Surface	417429.96660000000	5380223.91170000000
42	CF-828	Surface	417429.96660000000	5380143.91170000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	CF-260	Surface	417609.966600000000	5380273.911700000000
44	CF-681	Surface	417699.966600000000	5380183.911700000000
45	CF-566	Surface	417429.966600000000	5380203.911700000000
46	CF-311	Surface	417639.966600000000	5380263.911700000000
47	CF-715	Surface	417599.966600000000	5380173.911700000000
48	CF-792	Surface	417499.966600000000	5380153.911700000000
49	CF-309	Surface	417619.966600000000	5380263.911700000000
50	CF-58	Surface	417699.966600000000	5380323.911700000000
51	CF-554	Surface	417309.966600000000	5380203.911700000000
52	CF-23	Surface	417589.966600000000	5380333.911700000000
53	CF-274	Surface	417749.966600000000	5380273.911700000000
54	CF-21	Surface	417759.966600000000	5380343.911700000000
55	CF-289	Surface	417419.966600000000	5380263.911700000000
56	CF-93	Surface	417749.966600000000	5380313.911700000000
57	CF-421	Surface	417339.966600000000	5380233.911700000000
58	CF-928	Surface	417579.966600000000	5380123.911700000000
59	CF-180	Surface	417299.966600000000	5380283.911700000000
60	CF-265	Surface	417659.966600000000	5380273.911700000000
61	CF-629	Subsurface	417619.966600000000	5380193.911700000000
62	CF-537	Subsurface	417589.966600000000	5380213.911700000000
63	CF-934	Subsurface	417639.966600000000	5380123.911700000000
64	CF-615	Subsurface	417479.966600000000	5380193.911700000000
65	CF-473	Subsurface	417399.966600000000	5380223.911700000000
66	CF-729	Reserved	417299.966600000000	5380163.911700000000
67	CF-403	Reserved	417619.966600000000	5380243.911700000000
68	CF-255	Reserved	417559.966600000000	5380273.911700000000
69	CF-279	Reserved	417319.966600000000	5380263.911700000000
70	CF-55	Reserved	417669.966600000000	5380323.911700000000
71	CF-63	Reserved	417749.966600000000	5380323.911700000000
72	CF-87	Reserved	417689.966600000000	5380313.911700000000
73	CF-361	Reserved	417669.966600000000	5380253.911700000000
74	CF-329	Reserved	417349.966600000000	5380253.911700000000
75	CF-179	Reserved	417789.966600000000	5380293.911700000000
76	CF-477	Reserved	417439.966600000000	5380223.911700000000
77	CF-484	Reserved	417509.966600000000	5380223.911700000000
78	CF-674	Reserved	417629.966600000000	5380183.911700000000
79	CF-450	Reserved	417629.966600000000	5380233.911700000000
80	CF-256	Reserved	417569.966600000000	5380273.911700000000
81	CF-703	Reserved	417479.966600000000	5380173.911700000000
82	CF-485	Reserved	417519.966600000000	5380223.911700000000
83	CF-941	Reserved	417709.966600000000	5380123.911700000000
84	CF-332	Reserved	417379.966600000000	5380253.911700000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	CF-308	Reserved	417609.966600000000	5380263.911700000000
86	CF-365	Reserved	417709.966600000000	5380253.911700000000
87	CF-170	Reserved	417699.966600000000	5380293.911700000000
88	CF-1006	Reserved	417519.966600000000	5380103.911700000000
89	CF-222	Reserved	417719.966600000000	5380283.911700000000
90	CF-245	Reserved	417459.966600000000	5380273.911700000000
91	CF-763	Reserved	417639.966600000000	5380163.911700000000
92	CF-855	Reserved	417699.966600000000	5380143.911700000000
93	CF-390	Reserved	417489.966600000000	5380243.911700000000
94	CF-961	Reserved	417489.966600000000	5380113.911700000000
95	CF-606	Reserved	417389.966600000000	5380193.911700000000
96	CF-933	Reserved	417629.966600000000	5380123.911700000000
97	CF-530	Reserved	417519.966600000000	5380213.911700000000
98	CF-694	Reserved	417389.966600000000	5380173.911700000000
99	CF-159	Reserved	417589.966600000000	5380293.911700000000
100	CF-978	Reserved	417659.966600000000	5380113.911700000000
101	CF-221	Reserved	417709.966600000000	5380283.911700000000
102	CF-241	Reserved	417419.966600000000	5380273.911700000000
103	CF-521	Reserved	417429.966600000000	5380213.911700000000
104	CF-1020	Reserved	417659.966600000000	5380103.911700000000
105	CF-225	Reserved	417749.966600000000	5380283.911700000000
106	CF-94	Reserved	417759.966600000000	5380313.911700000000
107	CF-573	Reserved	417499.966600000000	5380203.911700000000
108	CF-177	Reserved	417769.966600000000	5380293.911700000000
109	CF-877	Reserved	417489.966600000000	5380133.911700000000
110	CF-870	Reserved	417419.966600000000	5380133.911700000000
111	CF-904	Reserved	417339.966600000000	5380123.911700000000
112	CF-950	Reserved	417379.966600000000	5380113.911700000000
113	CF-818	Reserved	417329.966600000000	5380143.911700000000
114	CF-884	Reserved	417559.966600000000	5380133.911700000000
115	CF-552	Reserved	417739.966600000000	5380213.911700000000
116	CF-52	Reserved	417639.966600000000	5380323.911700000000
117	CF-171	Reserved	417709.966600000000	5380293.911700000000
118	CF-379	Reserved	417379.966600000000	5380243.911700000000
119	CF-203	Reserved	417529.966600000000	5380283.911700000000
120	CF-688	Reserved	417329.966600000000	5380173.911700000000
121	CF-830	Reserved	417449.966600000000	5380143.911700000000
122	CF-599	Reserved	417319.966600000000	5380193.911700000000
123	CF-633	Reserved	417659.966600000000	5380193.911700000000
124	CF-656	Reserved	417449.966600000000	5380183.911700000000
125	CF-650	Reserved	417389.966600000000	5380183.911700000000
126	CF-116	Reserved	417599.966600000000	5380303.911700000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	CF-80	Reserved	417619.96660000000	5380313.91170000000
128	CF-986	Reserved	417319.96660000000	5380103.91170000000
129	CF-598	Reserved	417309.96660000000	5380193.91170000000
130	CF-861	Reserved	417329.96660000000	5380133.91170000000
131	CF-617	Reserved	417499.96660000000	5380193.91170000000
132	CF-956	Reserved	417439.96660000000	5380113.91170000000
133	CF-558	Reserved	417349.96660000000	5380203.91170000000
134	CF-596	Reserved	417729.96660000000	5380203.91170000000
135	CF-737	Reserved	417379.96660000000	5380163.91170000000
136	CF-802	Reserved	417599.96660000000	5380153.91170000000
137	CF-657	Reserved	417459.96660000000	5380183.91170000000
138	CF-591	Reserved	417679.96660000000	5380203.91170000000
139	CF-119	Reserved	417629.96660000000	5380303.91170000000
140	CF-507	Reserved	417739.96660000000	5380223.91170000000
141	CF-752	Reserved	417529.96660000000	5380163.91170000000
142	CF-816	Reserved	417309.96660000000	5380143.91170000000
143	CF-291	Reserved	417439.96660000000	5380263.91170000000
144	CF-926	Reserved	417559.96660000000	5380123.91170000000
145	CF-181	Reserved	417309.96660000000	5380283.91170000000
146	CF-669	Reserved	417579.96660000000	5380183.91170000000
147	CF-194	Reserved	417439.96660000000	5380283.91170000000
148	CF-981	Reserved	417689.96660000000	5380113.91170000000
149	CF-973	Reserved	417609.96660000000	5380113.91170000000
150	CF-1028	Reserved	417529.96660000000	5380093.91170000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	CR-214	Surface	417799.88790000000	5381050.98880000000
2	CR-305	Surface	417899.88790000000	5381010.98880000000
3	CR-226	Surface	417919.88790000000	5381050.98880000000
4	CR-129	Surface	417859.88790000000	5381100.98880000000
5	CR-315	Surface	417849.88790000000	5381000.98880000000
6	CR-137	Surface	417789.88790000000	5381090.98880000000
7	CR-57	Surface	417809.88790000000	5381160.98880000000
8	CR-210	Surface	417759.88790000000	5381050.98880000000
9	CR-353	Surface	417959.88790000000	5380970.98880000000
10	CR-355	Surface	417929.88790000000	5380960.98880000000
11	CR-303	Surface	417879.88790000000	5381010.98880000000
12	CR-108	Surface	417789.88790000000	5381110.98880000000
13	CR-257	Surface	417769.88790000000	5381030.98880000000
14	CR-106	Surface	417889.88790000000	5381120.98880000000
15	CR-194	Surface	417809.88790000000	5381060.98880000000
16	CR-183	Surface	417889.88790000000	5381070.98880000000
17	CR-158	Surface	417829.88790000000	5381080.98880000000
18	CR-117	Surface	417879.88790000000	5381110.98880000000
19	CR-27	Surface	417879.88790000000	5381200.98880000000
20	CR-102	Surface	417849.88790000000	5381120.98880000000
21	CR-72	Surface	417859.88790000000	5381150.98880000000
22	CR-357	Surface	417949.88790000000	5380960.98880000000
23	CR-181	Surface	417869.88790000000	5381070.98880000000
24	CR-14	Surface	417899.88790000000	5381220.98880000000
25	CR-48	Surface	417819.88790000000	5381170.98880000000
26	CR-341	Surface	417979.88790000000	5380990.98880000000
27	CR-229	Surface	417949.88790000000	5381050.98880000000
28	CR-324	Surface	417939.88790000000	5381000.98880000000
29	CR-31	Surface	417829.88790000000	5381190.98880000000
30	CR-256	Surface	417759.88790000000	5381030.98880000000
31	CR-275	Surface	417949.88790000000	5381030.98880000000
32	CR-179	Surface	417849.88790000000	5381070.98880000000
33	CR-189	Surface	417759.88790000000	5381060.98880000000
34	CR-332	Surface	417879.88790000000	5380990.98880000000
35	CR-271	Surface	417909.88790000000	5381030.98880000000
36	CR-310	Surface	417949.88790000000	5381010.98880000000
37	CR-243	Surface	417869.88790000000	5381040.98880000000
38	CR-356	Surface	417939.88790000000	5380960.98880000000
39	CR-84	Surface	417879.88790000000	5381140.98880000000
40	CR-227	Surface	417929.88790000000	5381050.98880000000
41	CR-328	Surface	417979.88790000000	5381000.98880000000
42	CR-301	Surface	417859.88790000000	5381010.98880000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	CR-59	Surface	417829.88790000000	5381160.98880000000
44	CR-191	Surface	417779.88790000000	5381060.98880000000
45	CR-139	Surface	417809.88790000000	5381090.98880000000
46	CR-40	Surface	417829.88790000000	5381180.98880000000
47	CR-200	Surface	417869.88790000000	5381060.98880000000
48	CR-23	Surface	417839.88790000000	5381200.98880000000
49	CR-337	Surface	417939.88790000000	5380990.98880000000
50	CR-121	Surface	417779.88790000000	5381100.98880000000
51	CR-188	Surface	417939.88790000000	5381070.98880000000
52	CR-155	Surface	417799.88790000000	5381080.98880000000
53	CR-73	Surface	417869.88790000000	5381150.98880000000
54	CR-233	Surface	417769.88790000000	5381040.98880000000
55	CR-199	Surface	417859.88790000000	5381060.98880000000
56	CR-289	Surface	417889.88790000000	5381020.98880000000
57	CR-16	Surface	417849.88790000000	5381210.98880000000
58	CR-184	Surface	417899.88790000000	5381070.98880000000
59	CR-347	Surface	417959.88790000000	5380980.98880000000
60	CR-253	Surface	417969.88790000000	5381040.98880000000
61	CR-62	Subsurface	417859.88790000000	5381160.98880000000
62	CR-323	Subsurface	417929.88790000000	5381000.98880000000
63	CR-269	Subsurface	417889.88790000000	5381030.98880000000
64	CR-273	Subsurface	417929.88790000000	5381030.98880000000
65	CR-10	Subsurface	417859.88790000000	5381220.98880000000
66	CR-186	Reserved	417919.88790000000	5381070.98880000000
67	CR-193	Reserved	417799.88790000000	5381060.98880000000
68	CR-225	Reserved	417909.88790000000	5381050.98880000000
69	CR-336	Reserved	417929.88790000000	5380990.98880000000
70	CR-166	Reserved	417909.88790000000	5381080.98880000000
71	CR-318	Reserved	417879.88790000000	5381000.98880000000
72	CR-79	Reserved	417829.88790000000	5381140.98880000000
73	CR-171	Reserved	417769.88790000000	5381070.98880000000
74	CR-13	Reserved	417889.88790000000	5381220.98880000000
75	CR-280	Reserved	417799.88790000000	5381020.98880000000
76	CR-51	Reserved	417849.88790000000	5381170.98880000000
77	CR-77	Reserved	417809.88790000000	5381140.98880000000
78	CR-262	Reserved	417819.88790000000	5381030.98880000000
79	CR-142	Reserved	417839.88790000000	5381090.98880000000
80	CR-133	Reserved	417899.88790000000	5381100.98880000000
81	CR-138	Reserved	417799.88790000000	5381090.98880000000
82	CR-252	Reserved	417959.88790000000	5381040.98880000000
83	CR-58	Reserved	417819.88790000000	5381160.98880000000
84	CR-107	Reserved	417899.88790000000	5381120.98880000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	CR-103	Reserved	417859.88790000000	5381120.98880000000
86	CR-96	Reserved	417789.88790000000	5381120.98880000000
87	CR-339	Reserved	417959.88790000000	5380990.98880000000
88	CR-292	Reserved	417919.88790000000	5381020.98880000000
89	CR-173	Reserved	417789.88790000000	5381070.98880000000
90	CR-264	Reserved	417839.88790000000	5381030.98880000000
91	CR-220	Reserved	417859.88790000000	5381050.98880000000
92	CR-298	Reserved	417979.88790000000	5381020.98880000000
93	CR-197	Reserved	417839.88790000000	5381060.98880000000
94	CR-168	Reserved	417929.88790000000	5381080.98880000000
95	CR-299	Reserved	417839.88790000000	5381010.98880000000
96	CR-358	Reserved	417959.88790000000	5380960.98880000000
97	CR-317	Reserved	417869.88790000000	5381000.98880000000
98	CR-112	Reserved	417829.88790000000	5381110.98880000000
99	CR-8	Reserved	417899.88790000000	5381230.98880000000
100	CR-205	Reserved	417919.88790000000	5381060.98880000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	BB-380	Surface	415200.25570000000	5374144.50210000000
2	BB-143	Surface	415210.25570000000	5374244.50210000000
3	BB-52	Surface	415390.25570000000	5374304.50210000000
4	BB-184	Surface	415370.25570000000	5374234.50210000000
5	BB-179	Surface	415320.25570000000	5374234.50210000000
6	BB-325	Surface	415250.25570000000	5374174.50210000000
7	BB-345	Surface	415240.25570000000	5374164.50210000000
8	BB-503	Surface	415100.25570000000	5374044.50210000000
9	BB-527	Surface	415120.25570000000	5374024.50210000000
10	BB-253	Surface	415270.25570000000	5374204.50210000000
11	BB-155	Surface	415330.25570000000	5374244.50210000000
12	BB-49	Surface	415360.25570000000	5374304.50210000000
13	BB-339	Surface	415180.25570000000	5374164.50210000000
14	BB-268	Surface	415150.25570000000	5374194.50210000000
15	BB-139	Surface	415390.25570000000	5374254.50210000000
16	BB-165	Surface	415180.25570000000	5374234.50210000000
17	BB-529	Surface	415030.25570000000	5374014.50210000000
18	BB-27	Surface	415260.25570000000	5374314.50210000000
19	BB-15	Surface	415320.25570000000	5374334.50210000000
20	BB-254	Surface	415280.25570000000	5374204.50210000000
21	BB-97	Surface	415360.25570000000	5374274.50210000000
22	BB-203	Surface	415300.25570000000	5374224.50210000000
23	BB-50	Surface	415370.25570000000	5374304.50210000000
24	BB-431	Surface	415090.25570000000	5374104.50210000000
25	BB-69	Surface	415260.25570000000	5374284.50210000000
26	BB-124	Surface	415240.25570000000	5374254.50210000000
27	BB-340	Surface	415190.25570000000	5374164.50210000000
28	BB-160	Surface	415380.25570000000	5374244.50210000000
29	BB-459	Surface	415110.25570000000	5374084.50210000000
30	BB-379	Surface	415190.25570000000	5374144.50210000000
31	BB-209	Surface	415360.25570000000	5374224.50210000000
32	BB-592	Surface	415110.25570000000	5373964.50210000000
33	BB-361	Surface	415200.25570000000	5374154.50210000000
34	BB-164	Surface	415170.25570000000	5374234.50210000000
35	BB-163	Surface	415410.25570000000	5374244.50210000000
36	BB-553	Surface	415050.25570000000	5373994.50210000000
37	BB-541	Surface	415040.25570000000	5374004.50210000000
38	BB-169	Surface	415220.25570000000	5374234.50210000000
39	BB-417	Surface	415090.25570000000	5374114.50210000000
40	BB-342	Surface	415210.25570000000	5374164.50210000000
41	BB-286	Surface	415330.25570000000	5374194.50210000000
42	BB-230	Surface	415310.25570000000	5374214.50210000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	BB-140	Surface	415400.25570000000	5374254.50210000000
44	BB-387	Surface	415100.25570000000	5374134.50210000000
45	BB-264	Surface	415380.25570000000	5374204.50210000000
46	BB-131	Surface	415310.25570000000	5374254.50210000000
47	BB-467	Surface	415080.25570000000	5374074.50210000000
48	BB-20	Surface	415290.25570000000	5374324.50210000000
49	BB-266	Surface	415130.25570000000	5374194.50210000000
50	BB-555	Surface	415070.25570000000	5373994.50210000000
51	BB-456	Surface	415080.25570000000	5374084.50210000000
52	BB-3	Surface	415290.25570000000	5374354.50210000000
53	BB-13	Surface	415300.25570000000	5374334.50210000000
54	BB-563	Surface	415040.25570000000	5373984.50210000000
55	BB-407	Surface	415140.25570000000	5374124.50210000000
56	BB-378	Surface	415180.25570000000	5374144.50210000000
57	BB-158	Surface	415360.25570000000	5374244.50210000000
58	BB-60	Surface	415320.25570000000	5374294.50210000000
59	BB-505	Surface	415120.25570000000	5374044.50210000000
60	BB-311	Surface	415110.25570000000	5374174.50210000000
61	BB-401	Subsurface	415080.25570000000	5374124.50210000000
62	BB-554	Subsurface	415060.25570000000	5373994.50210000000
63	BB-260	Subsurface	415340.25570000000	5374204.50210000000
64	BB-445	Subsurface	415090.25570000000	5374094.50210000000
65	BB-189	Subsurface	415160.25570000000	5374224.50210000000
66	BB-185	Reserved	415380.25570000000	5374234.50210000000
67	BB-419	Reserved	415110.25570000000	5374114.50210000000
68	BB-43	Reserved	415300.25570000000	5374304.50210000000
69	BB-125	Reserved	415250.25570000000	5374254.50210000000
70	BB-108	Reserved	415280.25570000000	5374264.50210000000
71	BB-320	Reserved	415200.25570000000	5374174.50210000000
72	BB-239	Reserved	415400.25570000000	5374214.50210000000
73	BB-6	Reserved	415290.25570000000	5374344.50210000000
74	BB-450	Reserved	415140.25570000000	5374094.50210000000
75	BB-128	Reserved	415280.25570000000	5374254.50210000000
76	BB-273	Reserved	415200.25570000000	5374194.50210000000
77	BB-487	Reserved	415050.25570000000	5374054.50210000000
78	BB-429	Reserved	415070.25570000000	5374104.50210000000
79	BB-257	Reserved	415310.25570000000	5374204.50210000000
80	BB-447	Reserved	415110.25570000000	5374094.50210000000
81	BB-227	Reserved	415280.25570000000	5374214.50210000000
82	BB-536	Reserved	415100.25570000000	5374014.50210000000
83	BB-308	Reserved	415300.25570000000	5374184.50210000000
84	BB-483	Reserved	415130.25570000000	5374064.50210000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	BB-280	Reserved	415270.25570000000	5374194.50210000000
86	BB-39	Reserved	415260.25570000000	5374304.50210000000
87	BB-7	Reserved	415300.25570000000	5374344.50210000000
88	BB-360	Reserved	415190.25570000000	5374154.50210000000
89	BB-301	Reserved	415230.25570000000	5374184.50210000000
90	BB-583	Reserved	415020.25570000000	5373964.50210000000
91	BB-241	Reserved	415150.25570000000	5374204.50210000000
92	BB-132	Reserved	415320.25570000000	5374254.50210000000
93	BB-287	Reserved	415340.25570000000	5374194.50210000000
94	BB-468	Reserved	415090.25570000000	5374074.50210000000
95	BB-83	Reserved	415400.25570000000	5374284.50210000000
96	BB-534	Reserved	415080.25570000000	5374014.50210000000
97	BB-31	Reserved	415300.25570000000	5374314.50210000000
98	BB-299	Reserved	415210.25570000000	5374184.50210000000
99	BB-535	Reserved	415090.25570000000	5374014.50210000000
100	BB-86	Reserved	415250.25570000000	5374274.50210000000
101	BB-585	Reserved	415040.25570000000	5373964.50210000000
102	BB-548	Reserved	415110.25570000000	5374004.50210000000
103	BB-72	Reserved	415290.25570000000	5374284.50210000000
104	BB-137	Reserved	415370.25570000000	5374254.50210000000
105	BB-460	Reserved	415120.25570000000	5374084.50210000000
106	BB-413	Reserved	415050.25570000000	5374114.50210000000
107	BB-433	Reserved	415110.25570000000	5374104.50210000000
108	BB-533	Reserved	415070.25570000000	5374014.50210000000
109	BB-292	Reserved	415140.25570000000	5374184.50210000000
110	BB-349	Reserved	415280.25570000000	5374164.50210000000
111	BB-117	Reserved	415370.25570000000	5374264.50210000000
112	BB-193	Reserved	415200.25570000000	5374224.50210000000
113	BB-584	Reserved	415030.25570000000	5373964.50210000000
114	BB-65	Reserved	415370.25570000000	5374294.50210000000
115	BB-477	Reserved	415070.25570000000	5374064.50210000000
116	BB-147	Reserved	415250.25570000000	5374244.50210000000
117	BB-162	Reserved	415400.25570000000	5374244.50210000000
118	BB-211	Reserved	415380.25570000000	5374224.50210000000
119	BB-63	Reserved	415350.25570000000	5374294.50210000000
120	BB-318	Reserved	415180.25570000000	5374174.50210000000
121	BB-64	Reserved	415360.25570000000	5374294.50210000000
122	BB-16	Reserved	415330.25570000000	5374334.50210000000
123	BB-449	Reserved	415130.25570000000	5374094.50210000000
124	BB-470	Reserved	415110.25570000000	5374074.50210000000
125	BB-568	Reserved	415090.25570000000	5373984.50210000000
126	BB-493	Reserved	415110.25570000000	5374054.50210000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	BB-295	Reserved	415170.25570000000	5374184.50210000000
128	BB-220	Reserved	415210.25570000000	5374214.50210000000
129	BB-61	Reserved	415330.25570000000	5374294.50210000000
130	BB-1	Reserved	415280.25570000000	5374364.50210000000
131	BB-247	Reserved	415210.25570000000	5374204.50210000000
132	BB-329	Reserved	415290.25570000000	5374174.50210000000
133	BB-11	Reserved	415280.25570000000	5374334.50210000000
134	BB-98	Reserved	415370.25570000000	5374274.50210000000
135	BB-290	Reserved	415120.25570000000	5374184.50210000000
136	BB-578	Reserved	415080.25570000000	5373974.50210000000
137	BB-26	Reserved	415350.25570000000	5374324.50210000000
138	BB-223	Reserved	415240.25570000000	5374214.50210000000
139	BB-187	Reserved	415400.25570000000	5374234.50210000000
140	BB-256	Reserved	415300.25570000000	5374204.50210000000
141	BB-142	Reserved	415200.25570000000	5374244.50210000000
142	BB-294	Reserved	415160.25570000000	5374184.50210000000
143	BB-87	Reserved	415260.25570000000	5374274.50210000000
144	BB-395	Reserved	415180.25570000000	5374134.50210000000
145	BB-336	Reserved	415150.25570000000	5374164.50210000000
146	BB-422	Reserved	415140.25570000000	5374114.50210000000
147	BB-101	Reserved	415400.25570000000	5374274.50210000000
148	BB-427	Reserved	415050.25570000000	5374104.50210000000
149	BB-129	Reserved	415290.25570000000	5374254.50210000000
150	BB-274	Reserved	415210.25570000000	5374194.50210000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	AA-91	Surface	414866.94880000000	5345789.82620000000
2	AA-443	Surface	414841.94880000000	5345694.82620000000
3	AA-601	Surface	414666.94880000000	5345674.82620000000
4	AA-194	Surface	414891.94880000000	5345739.82620000000
5	AA-118	Surface	414861.94880000000	5345774.82620000000
6	AA-6	Surface	414846.94880000000	5345854.82620000000
7	AA-683	Surface	414661.94880000000	5345664.82620000000
8	AA-503	Surface	414646.94880000000	5345684.82620000000
9	AA-253	Surface	414861.94880000000	5345724.82620000000
10	AA-819	Surface	414741.94880000000	5345644.82620000000
11	AA-658	Surface	414736.94880000000	5345669.82620000000
12	AA-216	Surface	414641.94880000000	5345729.82620000000
13	AA-724	Surface	414681.94880000000	5345659.82620000000
14	AA-775	Surface	414771.94880000000	5345654.82620000000
15	AA-224	Surface	414681.94880000000	5345729.82620000000
16	AA-98	Surface	414856.94880000000	5345784.82620000000
17	AA-548	Surface	414871.94880000000	5345684.82620000000
18	AA-587	Surface	414826.94880000000	5345679.82620000000
19	AA-621	Surface	414766.94880000000	5345674.82620000000
20	AA-425	Surface	414751.94880000000	5345694.82620000000
21	AA-196	Surface	414646.94880000000	5345734.82620000000
22	AA-783	Surface	414811.94880000000	5345654.82620000000
23	AA-338	Surface	414671.94880000000	5345704.82620000000
24	AA-592	Surface	414851.94880000000	5345679.82620000000
25	AA-297	Surface	414851.94880000000	5345714.82620000000
26	AA-553	Surface	414656.94880000000	5345679.82620000000
27	AA-160	Surface	414896.94880000000	5345754.82620000000
28	AA-568	Surface	414731.94880000000	5345679.82620000000
29	AA-566	Surface	414721.94880000000	5345679.82620000000
30	AA-188	Surface	414861.94880000000	5345739.82620000000
31	AA-127	Surface	414861.94880000000	5345769.82620000000
32	AA-89	Surface	414856.94880000000	5345789.82620000000
33	AA-599	Surface	414656.94880000000	5345674.82620000000
34	AA-340	Surface	414681.94880000000	5345704.82620000000
35	AA-1	Surface	414841.94880000000	5345859.82620000000
36	AA-549	Surface	414636.94880000000	5345679.82620000000
37	AA-27	Surface	414841.94880000000	5345834.82620000000
38	AA-685	Surface	414671.94880000000	5345664.82620000000
39	AA-797	Surface	414741.94880000000	5345649.82620000000
40	AA-412	Surface	414686.94880000000	5345694.82620000000
41	AA-582	Surface	414801.94880000000	5345679.82620000000
42	AA-457	Surface	414661.94880000000	5345689.82620000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	AA-675	Surface	414821.94880000000	5345669.82620000000
44	AA-35	Surface	414846.94880000000	5345829.82620000000
45	AA-4	Surface	414836.94880000000	5345854.82620000000
46	AA-49	Surface	414851.94880000000	5345819.82620000000
47	AA-223	Surface	414676.94880000000	5345729.82620000000
48	AA-834	Surface	414751.94880000000	5345639.82620000000
49	AA-335	Surface	414656.94880000000	5345704.82620000000
50	AA-249	Surface	414841.94880000000	5345724.82620000000
51	AA-424	Surface	414746.94880000000	5345694.82620000000
52	AA-516	Surface	414711.94880000000	5345684.82620000000
53	AA-593	Surface	414856.94880000000	5345679.82620000000
54	AA-102	Surface	414876.94880000000	5345784.82620000000
55	AA-43	Surface	414851.94880000000	5345824.82620000000
56	AA-177	Surface	414891.94880000000	5345744.82620000000
57	AA-473	Surface	414741.94880000000	5345689.82620000000
58	AA-767	Surface	414731.94880000000	5345654.82620000000
59	AA-649	Surface	414691.94880000000	5345669.82620000000
60	AA-751	Surface	414816.94880000000	5345659.82620000000
61	AA-121	Subsurface	414876.94880000000	5345774.82620000000
62	AA-427	Subsurface	414761.94880000000	5345694.82620000000
63	AA-256	Subsurface	414876.94880000000	5345724.82620000000
64	AA-552	Subsurface	414651.94880000000	5345679.82620000000
65	AA-64	Subsurface	414866.94880000000	5345809.82620000000
66	AA-239	Reserved	414646.94880000000	5345724.82620000000
67	AA-448	Reserved	414866.94880000000	5345694.82620000000
68	AA-486	Reserved	414806.94880000000	5345689.82620000000
69	AA-578	Reserved	414781.94880000000	5345679.82620000000
70	AA-472	Reserved	414736.94880000000	5345689.82620000000
71	AA-432	Reserved	414786.94880000000	5345694.82620000000
72	AA-300	Reserved	414866.94880000000	5345714.82620000000
73	AA-373	Reserved	414701.94880000000	5345699.82620000000
74	AA-264	Reserved	414651.94880000000	5345719.82620000000
75	AA-408	Reserved	414666.94880000000	5345694.82620000000
76	AA-63	Reserved	414861.94880000000	5345809.82620000000
77	AA-534	Reserved	414801.94880000000	5345684.82620000000
78	AA-789	Reserved	414701.94880000000	5345649.82620000000
79	AA-189	Reserved	414866.94880000000	5345739.82620000000
80	AA-197	Reserved	414651.94880000000	5345734.82620000000
81	AA-294	Reserved	414836.94880000000	5345714.82620000000
82	AA-439	Reserved	414821.94880000000	5345694.82620000000
83	AA-506	Reserved	414661.94880000000	5345684.82620000000
84	AA-824	Reserved	414766.94880000000	5345644.82620000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	AA-547	Reserved	414866.94880000000	5345684.82620000000
86	AA-112	Reserved	414876.94880000000	5345779.82620000000
87	AA-375	Reserved	414756.94880000000	5345699.82620000000
88	AA-580	Reserved	414791.94880000000	5345679.82620000000
89	AA-69	Reserved	414861.94880000000	5345804.82620000000
90	AA-423	Reserved	414741.94880000000	5345694.82620000000
91	AA-504	Reserved	414651.94880000000	5345684.82620000000
92	AA-530	Reserved	414781.94880000000	5345684.82620000000
93	AA-254	Reserved	414866.94880000000	5345724.82620000000
94	AA-792	Reserved	414716.94880000000	5345649.82620000000
95	AA-205	Reserved	414691.94880000000	5345734.82620000000
96	AA-70	Reserved	414866.94880000000	5345804.82620000000
97	AA-76	Reserved	414866.94880000000	5345799.82620000000
98	AA-364	Reserved	414656.94880000000	5345699.82620000000
99	AA-399	Reserved	414876.94880000000	5345699.82620000000
100	AA-444	Reserved	414846.94880000000	5345694.82620000000
101	AA-442	Reserved	414836.94880000000	5345694.82620000000
102	AA-32	Reserved	414831.94880000000	5345829.82620000000
103	AA-145	Reserved	414861.94880000000	5345759.82620000000
104	AA-180	Reserved	414656.94880000000	5345739.82620000000
105	AA-381	Reserved	414786.94880000000	5345699.82620000000
106	AA-464	Reserved	414696.94880000000	5345689.82620000000
107	AA-833	Reserved	414746.94880000000	5345639.82620000000
108	AA-744	Reserved	414781.94880000000	5345659.82620000000
109	AA-149	Reserved	414881.94880000000	5345759.82620000000
110	AA-315	Reserved	414676.94880000000	5345709.82620000000
111	AA-682	Reserved	414656.94880000000	5345664.82620000000
112	AA-708	Reserved	414786.94880000000	5345664.82620000000
113	AA-341	Reserved	414801.94880000000	5345704.82620000000
114	AA-571	Reserved	414746.94880000000	5345679.82620000000
115	AA-156	Reserved	414876.94880000000	5345754.82620000000
116	AA-124	Reserved	414891.94880000000	5345774.82620000000
117	AA-402	Reserved	414636.94880000000	5345694.82620000000
118	AA-641	Reserved	414651.94880000000	5345669.82620000000
119	AA-225	Reserved	414686.94880000000	5345729.82620000000
120	AA-154	Reserved	414866.94880000000	5345754.82620000000
121	AA-680	Reserved	414846.94880000000	5345669.82620000000
122	AA-609	Reserved	414706.94880000000	5345674.82620000000
123	AA-698	Reserved	414736.94880000000	5345664.82620000000
124	AA-348	Reserved	414836.94880000000	5345704.82620000000
125	AA-478	Reserved	414766.94880000000	5345689.82620000000
126	AA-270	Reserved	414681.94880000000	5345719.82620000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	AA-536	Reserved	414811.94880000000	5345684.82620000000
128	AA-329	Reserved	414886.94880000000	5345709.82620000000
129	AA-562	Reserved	414701.94880000000	5345679.82620000000
130	AA-129	Reserved	414871.94880000000	5345769.82620000000
131	AA-823	Reserved	414761.94880000000	5345644.82620000000
132	AA-24	Reserved	414826.94880000000	5345834.82620000000
133	AA-788	Reserved	414696.94880000000	5345649.82620000000
134	AA-12	Reserved	414831.94880000000	5345844.82620000000
135	AA-471	Reserved	414731.94880000000	5345689.82620000000
136	AA-84	Reserved	414871.94880000000	5345794.82620000000
137	AA-527	Reserved	414766.94880000000	5345684.82620000000
138	AA-458	Reserved	414666.94880000000	5345689.82620000000
139	AA-404	Reserved	414646.94880000000	5345694.82620000000
140	AA-19	Reserved	414836.94880000000	5345839.82620000000
141	AA-20	Reserved	414841.94880000000	5345839.82620000000
142	AA-110	Reserved	414866.94880000000	5345779.82620000000
143	AA-575	Reserved	414766.94880000000	5345679.82620000000
144	AA-728	Reserved	414701.94880000000	5345659.82620000000
145	AA-398	Reserved	414871.94880000000	5345699.82620000000
146	AA-26	Reserved	414836.94880000000	5345834.82620000000
147	AA-344	Reserved	414816.94880000000	5345704.82620000000
148	AA-526	Reserved	414761.94880000000	5345684.82620000000
149	AA-500	Reserved	414876.94880000000	5345689.82620000000
150	AA-659	Reserved	414741.94880000000	5345669.82620000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	NZ-154	Surface	408231.42260000000	5332594.05060000000
2	NZ-214	Surface	408111.42260000000	5332564.05060000000
3	NZ-401	Surface	408281.42260000000	5332464.05060000000
4	NZ-18	Surface	408301.42260000000	5332674.05060000000
5	NZ-581	Surface	408111.42260000000	5332404.05060000000
6	NZ-40	Surface	408261.42260000000	5332654.05060000000
7	NZ-64	Surface	408341.42260000000	5332644.05060000000
8	NZ-29	Surface	408291.42260000000	5332664.05060000000
9	NZ-735	Surface	408111.42260000000	5332344.05060000000
10	NZ-716	Surface	408131.42260000000	5332354.05060000000
11	NZ-75	Surface	408271.42260000000	5332634.05060000000
12	NZ-98	Surface	408311.42260000000	5332624.05060000000
13	NZ-443	Surface	408381.42260000000	5332454.05060000000
14	NZ-563	Surface	408261.42260000000	5332414.05060000000
15	NZ-59	Surface	408291.42260000000	5332644.05060000000
16	NZ-251	Surface	408301.42260000000	5332554.05060000000
17	NZ-598	Surface	408281.42260000000	5332404.05060000000
18	NZ-699	Surface	408201.42260000000	5332364.05060000000
19	NZ-285	Surface	408101.42260000000	5332514.05060000000
20	NZ-127	Surface	408181.42260000000	5332604.05060000000
21	NZ-271	Surface	408161.42260000000	5332534.05060000000
22	NZ-216	Surface	408131.42260000000	5332564.05060000000
23	NZ-337	Surface	408161.42260000000	5332484.05060000000
24	NZ-627	Surface	408251.42260000000	5332394.05060000000
25	NZ-747	Surface	408051.42260000000	5332334.05060000000
26	NZ-540	Surface	408361.42260000000	5332424.05060000000
27	NZ-273	Surface	408181.42260000000	5332534.05060000000
28	NZ-498	Surface	408281.42260000000	5332434.05060000000
29	NZ-10	Surface	408341.42260000000	5332684.05060000000
30	NZ-268	Surface	408131.42260000000	5332534.05060000000
31	NZ-444	Surface	408391.42260000000	5332454.05060000000
32	NZ-622	Surface	408201.42260000000	5332394.05060000000
33	NZ-176	Surface	408211.42260000000	5332584.05060000000
34	NZ-631	Surface	408291.42260000000	5332394.05060000000
35	NZ-749	Surface	408071.42260000000	5332334.05060000000
36	NZ-212	Surface	408331.42260000000	5332574.05060000000
37	NZ-56	Surface	408261.42260000000	5332644.05060000000
38	NZ-695	Surface	408161.42260000000	5332364.05060000000
39	NZ-93	Surface	408261.42260000000	5332624.05060000000
40	NZ-738	Surface	408161.42260000000	5332344.05060000000
41	NZ-753	Surface	408031.42260000000	5332324.05060000000
42	NZ-242	Surface	408171.42260000000	5332554.05060000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	NZ-512	Surface	408081.42260000000	5332424.05060000000
44	NZ-247	Surface	408221.42260000000	5332554.05060000000
45	NZ-97	Surface	408301.42260000000	5332624.05060000000
46	NZ-545	Surface	408081.42260000000	5332414.05060000000
47	NZ-272	Surface	408171.42260000000	5332534.05060000000
48	NZ-646	Surface	408171.42260000000	5332384.05060000000
49	NZ-89	Surface	408221.42260000000	5332624.05060000000
50	NZ-162	Surface	408311.42260000000	5332594.05060000000
51	NZ-579	Surface	408091.42260000000	5332404.05060000000
52	NZ-182	Surface	408271.42260000000	5332584.05060000000
53	NZ-257	Surface	408141.42260000000	5332544.05060000000
54	NZ-565	Surface	408281.42260000000	5332414.05060000000
55	NZ-606	Surface	408361.42260000000	5332404.05060000000
56	NZ-317	Surface	408131.42260000000	5332494.05060000000
57	NZ-171	Surface	408161.42260000000	5332584.05060000000
58	NZ-63	Surface	408331.42260000000	5332644.05060000000
59	NZ-53	Surface	408231.42260000000	5332644.05060000000
60	NZ-81	Surface	408331.42260000000	5332634.05060000000
61	NZ-714	Subsurface	408111.42260000000	5332354.05060000000
62	NZ-572	Subsurface	408351.42260000000	5332414.05060000000
63	NZ-521	Subsurface	408171.42260000000	5332424.05060000000
64	NZ-368	Subsurface	408261.42260000000	5332474.05060000000
65	NZ-229	Subsurface	408261.42260000000	5332564.05060000000
66	NZ-389	Reserved	408161.42260000000	5332464.05060000000
67	NZ-260	Reserved	408171.42260000000	5332544.05060000000
68	NZ-115	Reserved	408281.42260000000	5332614.05060000000
69	NZ-601	Reserved	408311.42260000000	5332404.05060000000
70	NZ-589	Reserved	408191.42260000000	5332404.05060000000
71	NZ-341	Reserved	408201.42260000000	5332484.05060000000
72	NZ-232	Reserved	408291.42260000000	5332564.05060000000
73	NZ-108	Reserved	408211.42260000000	5332614.05060000000
74	NZ-451	Reserved	408141.42260000000	5332444.05060000000
75	NZ-587	Reserved	408171.42260000000	5332404.05060000000
76	NZ-181	Reserved	408261.42260000000	5332584.05060000000
77	NZ-586	Reserved	408161.42260000000	5332404.05060000000
78	NZ-457	Reserved	408201.42260000000	5332444.05060000000
79	NZ-138	Reserved	408291.42260000000	5332604.05060000000
80	NZ-750	Reserved	408081.42260000000	5332334.05060000000
81	NZ-657	Reserved	408281.42260000000	5332384.05060000000
82	NZ-340	Reserved	408191.42260000000	5332484.05060000000
83	NZ-427	Reserved	408221.42260000000	5332454.05060000000
84	NZ-289	Reserved	408141.42260000000	5332514.05060000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	NZ-292	Reserved	408171.42260000000	5332514.05060000000
86	NZ-220	Reserved	408171.42260000000	5332564.05060000000
87	NZ-172	Reserved	408171.42260000000	5332584.05060000000
88	NZ-57	Reserved	408271.42260000000	5332644.05060000000
89	NZ-355	Reserved	408131.42260000000	5332474.05060000000
90	NZ-516	Reserved	408121.42260000000	5332424.05060000000
91	NZ-240	Reserved	408151.42260000000	5332554.05060000000
92	NZ-158	Reserved	408271.42260000000	5332594.05060000000
93	NZ-113	Reserved	408261.42260000000	5332614.05060000000
94	NZ-491	Reserved	408211.42260000000	5332434.05060000000
95	NZ-469	Reserved	408321.42260000000	5332444.05060000000
96	NZ-712	Reserved	408091.42260000000	5332354.05060000000
97	NZ-144	Reserved	408351.42260000000	5332604.05060000000
98	NZ-726	Reserved	408231.42260000000	5332354.05060000000
99	NZ-447	Reserved	408101.42260000000	5332444.05060000000
100	NZ-402	Reserved	408291.42260000000	5332464.05060000000
101	NZ-174	Reserved	408191.42260000000	5332584.05060000000
102	NZ-593	Reserved	408231.42260000000	5332404.05060000000
103	NZ-448	Reserved	408111.42260000000	5332444.05060000000
104	NZ-318	Reserved	408141.42260000000	5332494.05060000000
105	NZ-129	Reserved	408201.42260000000	5332604.05060000000
106	NZ-342	Reserved	408301.42260000000	5332484.05060000000
107	NZ-326	Reserved	408351.42260000000	5332494.05060000000
108	NZ-573	Reserved	408361.42260000000	5332414.05060000000
109	NZ-632	Reserved	408301.42260000000	5332394.05060000000
110	NZ-412	Reserved	408391.42260000000	5332464.05060000000
111	NZ-61	Reserved	408311.42260000000	5332644.05060000000
112	NZ-111	Reserved	408241.42260000000	5332614.05060000000
113	NZ-638	Reserved	408091.42260000000	5332384.05060000000
114	NZ-219	Reserved	408161.42260000000	5332564.05060000000
115	NZ-595	Reserved	408251.42260000000	5332404.05060000000
116	NZ-366	Reserved	408241.42260000000	5332474.05060000000
117	NZ-569	Reserved	408321.42260000000	5332414.05060000000
118	NZ-30	Reserved	408301.42260000000	5332664.05060000000
119	NZ-183	Reserved	408281.42260000000	5332584.05060000000
120	NZ-178	Reserved	408231.42260000000	5332584.05060000000
121	NZ-372	Reserved	408301.42260000000	5332474.05060000000
122	NZ-145	Reserved	408361.42260000000	5332604.05060000000
123	NZ-86	Reserved	408381.42260000000	5332634.05060000000
124	NZ-668	Reserved	408141.42260000000	5332374.05060000000
125	NZ-664	Reserved	408101.42260000000	5332374.05060000000
126	NZ-134	Reserved	408251.42260000000	5332604.05060000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	NZ-670	Reserved	408161.42260000000	5332374.05060000000
128	NZ-479	Reserved	408091.42260000000	5332434.05060000000
129	NZ-514	Reserved	408101.42260000000	5332424.05060000000
130	NZ-648	Reserved	408191.42260000000	5332384.05060000000
131	NZ-592	Reserved	408221.42260000000	5332404.05060000000
132	NZ-258	Reserved	408151.42260000000	5332544.05060000000
133	NZ-481	Reserved	408111.42260000000	5332434.05060000000
134	NZ-62	Reserved	408321.42260000000	5332644.05060000000
135	NZ-69	Reserved	408211.42260000000	5332634.05060000000
136	NZ-533	Reserved	408291.42260000000	5332424.05060000000
137	NZ-661	Reserved	408071.42260000000	5332374.05060000000
138	NZ-391	Reserved	408181.42260000000	5332464.05060000000
139	NZ-483	Reserved	408131.42260000000	5332434.05060000000
140	NZ-614	Reserved	408121.42260000000	5332394.05060000000
141	NZ-425	Reserved	408201.42260000000	5332454.05060000000
142	NZ-519	Reserved	408151.42260000000	5332424.05060000000
143	NZ-450	Reserved	408131.42260000000	5332444.05060000000
144	NZ-534	Reserved	408301.42260000000	5332424.05060000000
145	NZ-611	Reserved	408091.42260000000	5332394.05060000000
146	NZ-300	Reserved	408111.42260000000	5332504.05060000000
147	NZ-354	Reserved	408121.42260000000	5332474.05060000000
148	NZ-348	Reserved	408361.42260000000	5332484.05060000000
149	NZ-576	Reserved	408061.42260000000	5332404.05060000000
150	NZ-133	Reserved	408241.42260000000	5332604.05060000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	HT-1521	Surface	408180.12420000000	5331083.45050000000
2	HT-1171	Surface	408340.12420000000	5331203.45050000000
3	HT-1703	Surface	408190.12420000000	5330933.45050000000
4	HT-1548	Surface	408230.12420000000	5331063.45050000000
5	HT-1619	Surface	408170.12420000000	5330993.45050000000
6	HT-1569	Surface	408170.12420000000	5331033.45050000000
7	HT-658	Surface	408320.12420000000	5331303.45050000000
8	HT-1070	Surface	408230.12420000000	5331223.45050000000
9	HT-1746	Surface	408120.12420000000	5330843.45050000000
10	HT-159	Surface	408650.12420000000	5331433.45050000000
11	HT-1270	Surface	408480.12420000000	5331173.45050000000
12	HT-1579	Surface	408160.12420000000	5331023.45050000000
13	HT-805	Surface	408170.12420000000	5331273.45050000000
14	HT-1663	Surface	408150.12420000000	5330963.45050000000
15	HT-1126	Surface	408340.12420000000	5331213.45050000000
16	HT-99	Surface	408810.12420000000	5331463.45050000000
17	HT-659	Surface	408330.12420000000	5331303.45050000000
18	HT-185	Surface	408620.12420000000	5331423.45050000000
19	HT-1004	Surface	408550.12420000000	5331243.45050000000
20	HT-250	Surface	408700.12420000000	5331403.45050000000
21	HT-1311	Surface	408500.12420000000	5331163.45050000000
22	HT-744	Surface	408660.12420000000	5331293.45050000000
23	HT-1185	Surface	408480.12420000000	5331203.45050000000
24	HT-1740	Surface	408130.12420000000	5330853.45050000000
25	HT-166	Surface	408720.12420000000	5331433.45050000000
26	HT-44	Surface	408750.12420000000	5331483.45050000000
27	HT-37	Surface	408900.12420000000	5331493.45050000000
28	HT-1061	Surface	408620.12420000000	5331233.45050000000
29	HT-674	Surface	408480.12420000000	5331303.45050000000
30	HT-1718	Surface	408110.12420000000	5330893.45050000000
31	HT-200	Surface	408770.12420000000	5331423.45050000000
32	HT-1617	Surface	408150.12420000000	5330993.45050000000
33	HT-1733	Surface	408110.12420000000	5330863.45050000000
34	HT-1583	Surface	408200.12420000000	5331023.45050000000
35	HT-876	Surface	408330.12420000000	5331263.45050000000
36	HT-948	Surface	408510.12420000000	5331253.45050000000
37	HT-49	Surface	408800.12420000000	5331483.45050000000
38	HT-229	Surface	408780.12420000000	5331413.45050000000
39	HT-1362	Surface	408270.12420000000	5331143.45050000000
40	HT-1777	Surface	408120.12420000000	5330803.45050000000
41	HT-144	Surface	408760.12420000000	5331443.45050000000
42	HT-1645	Surface	408130.12420000000	5330973.45050000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	HT-1369	Surface	408340.12420000000	5331143.45050000000
44	HT-118	Surface	408740.12420000000	5331453.45050000000
45	HT-1498	Surface	408370.12420000000	5331103.45050000000
46	HT-1685	Surface	408110.12420000000	5330943.45050000000
47	HT-81	Surface	408880.12420000000	5331473.45050000000
48	HT-800	Surface	408670.12420000000	5331283.45050000000
49	HT-512	Surface	408160.12420000000	5331193.45050000000
50	HT-121	Surface	408770.12420000000	5331453.45050000000
51	HT-956	Surface	408590.12420000000	5331253.45050000000
52	HT-1138	Surface	408460.12420000000	5331213.45050000000
53	HT-1779	Surface	408140.12420000000	5330803.45050000000
54	HT-685	Surface	408590.12420000000	5331303.45050000000
55	HT-942	Surface	408450.12420000000	5331253.45050000000
56	HT-128	Surface	408840.12420000000	5331453.45050000000
57	HT-1258	Surface	408360.12420000000	5331173.45050000000
58	HT-831	Surface	408430.12420000000	5331273.45050000000
59	HT-1557	Surface	408240.12420000000	5331053.45050000000
60	HT-922	Surface	408250.12420000000	5331253.45050000000
61	HT-313	Subsurface	408710.12420000000	5331383.45050000000
62	HT-1573	Subsurface	408210.12420000000	5331033.45050000000
63	HT-754	Subsurface	408210.12420000000	5331283.45050000000
64	HT-1295	Subsurface	408340.12420000000	5331163.45050000000
65	HT-398	Subsurface	408450.12420000000	5331353.45050000000
66	HT-1722	Reserved	408100.12420000000	5330883.45050000000
67	HT-1333	Reserved	408340.12420000000	5331153.45050000000
68	HT-543	Reserved	408470.12420000000	5331193.45050000000
69	HT-156	Reserved	408620.12420000000	5331433.45050000000
70	HT-1458	Reserved	408260.12420000000	5331113.45050000000
71	HT-141	Reserved	408730.12420000000	5331443.45050000000
72	HT-1545	Reserved	408200.12420000000	5331063.45050000000
73	HT-1766	Reserved	408170.12420000000	5330823.45050000000
74	HT-1076	Reserved	408290.12420000000	5331223.45050000000
75	HT-916	Reserved	408190.12420000000	5331253.45050000000
76	HT-755	Reserved	408220.12420000000	5331283.45050000000
77	HT-1706	Reserved	408130.12420000000	5330923.45050000000
78	HT-56	Reserved	408870.12420000000	5331483.45050000000
79	HT-859	Reserved	408160.12420000000	5331263.45050000000
80	HT-35	Reserved	408880.12420000000	5331493.45050000000
81	HT-1636	Reserved	408190.12420000000	5330983.45050000000
82	HT-258	Reserved	408780.12420000000	5331403.45050000000
83	HT-760	Reserved	408270.12420000000	5331283.45050000000
84	HT-1123	Reserved	408310.12420000000	5331213.45050000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	HT-25	Reserved	408780.12420000000	5331493.45050000000
86	HT-552	Reserved	408560.12420000000	5331193.45050000000
87	HT-1375	Reserved	408400.12420000000	5331143.45050000000
88	HT-523	Reserved	408270.12420000000	5331193.45050000000
89	HT-351	Reserved	408740.12420000000	5331373.45050000000
90	HT-937	Reserved	408400.12420000000	5331253.45050000000
91	HT-221	Reserved	408700.12420000000	5331413.45050000000
92	HT-904	Reserved	408610.12420000000	5331263.45050000000
93	HT-34	Reserved	408870.12420000000	5331493.45050000000
94	HT-1598	Reserved	408230.12420000000	5331013.45050000000
95	HT-1271	Reserved	408490.12420000000	5331173.45050000000
96	HT-1544	Reserved	408190.12420000000	5331063.45050000000
97	HT-1365	Reserved	408300.12420000000	5331143.45050000000
98	HT-738	Reserved	408600.12420000000	5331293.45050000000
99	HT-231	Reserved	408800.12420000000	5331413.45050000000
100	HT-1724	Reserved	408120.12420000000	5330883.45050000000
101	HT-1313	Reserved	408520.12420000000	5331163.45050000000
102	HT-1764	Reserved	408150.12420000000	5330823.45050000000
103	HT-401	Reserved	408480.12420000000	5331353.45050000000
104	HT-905	Reserved	408620.12420000000	5331263.45050000000
105	HT-1506	Reserved	408190.12420000000	5331093.45050000000
106	HT-1195	Reserved	408580.12420000000	5331203.45050000000
107	HT-641	Reserved	408670.12420000000	5331313.45050000000
108	HT-1316	Reserved	408170.12420000000	5331153.45050000000
109	HT-799	Reserved	408660.12420000000	5331283.45050000000
110	HT-410	Reserved	408570.12420000000	5331353.45050000000
111	HT-1512	Reserved	408250.12420000000	5331093.45050000000
112	HT-96	Reserved	408780.12420000000	5331463.45050000000
113	HT-737	Reserved	408590.12420000000	5331293.45050000000
114	HT-1522	Reserved	408190.12420000000	5331083.45050000000
115	HT-1143	Reserved	408510.12420000000	5331213.45050000000
116	HT-1607	Reserved	408190.12420000000	5331003.45050000000
117	HT-816	Reserved	408280.12420000000	5331273.45050000000
118	HT-404	Reserved	408510.12420000000	5331353.45050000000
119	HT-524	Reserved	408280.12420000000	5331193.45050000000
120	HT-1647	Reserved	408150.12420000000	5330973.45050000000
121	HT-1273	Reserved	408510.12420000000	5331173.45050000000
122	HT-1304	Reserved	408430.12420000000	5331163.45050000000
123	HT-304	Reserved	408620.12420000000	5331383.45050000000
124	HT-608	Reserved	408340.12420000000	5331313.45050000000
125	HT-1027	Reserved	408280.12420000000	5331233.45050000000
126	HT-58	Reserved	408890.12420000000	5331483.45050000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	HT-1577	Reserved	408140.12420000000	5331023.45050000000
128	HT-1087	Reserved	408400.12420000000	5331223.45050000000
129	HT-1350	Reserved	408150.12420000000	5331143.45050000000
130	HT-1383	Reserved	408480.12420000000	5331143.45050000000
131	HT-55	Reserved	408860.12420000000	5331483.45050000000
132	HT-515	Reserved	408190.12420000000	5331193.45050000000
133	HT-1131	Reserved	408390.12420000000	5331213.45050000000
134	HT-1167	Reserved	408300.12420000000	5331203.45050000000
135	HT-186	Reserved	408630.12420000000	5331423.45050000000
136	HT-353	Reserved	408760.12420000000	5331373.45050000000
137	HT-1457	Reserved	408250.12420000000	5331113.45050000000
138	HT-1162	Reserved	408250.12420000000	5331203.45050000000
139	HT-1264	Reserved	408420.12420000000	5331173.45050000000
140	HT-1410	Reserved	408410.12420000000	5331133.45050000000
141	HT-1759	Reserved	408100.12420000000	5330823.45050000000
142	HT-995	Reserved	408460.12420000000	5331243.45050000000
143	HT-101	Reserved	408830.12420000000	5331463.45050000000
144	HT-1470	Reserved	408380.12420000000	5331113.45050000000
145	HT-1680	Reserved	408160.12420000000	5330953.45050000000
146	HT-1322	Reserved	408230.12420000000	5331153.45050000000
147	HT-1041	Reserved	408420.12420000000	5331233.45050000000
148	HT-411	Reserved	408580.12420000000	5331353.45050000000
149	HT-1751	Reserved	408100.12420000000	5330833.45050000000
150	HT-291	Reserved	408800.12420000000	5331393.45050000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	NA-559	Surface	398824.64920000000	5321731.98860000000
2	NA-537	Surface	399114.64920000000	5321741.98860000000
3	NA-574	Surface	398974.64920000000	5321731.98860000000
4	NA-292	Surface	398974.64920000000	5321801.98860000000
5	NA-769	Surface	399064.64920000000	5321691.98860000000
6	NA-592	Surface	399154.64920000000	5321731.98860000000
7	NA-249	Surface	398974.64920000000	5321811.98860000000
8	NA-283	Surface	399354.64920000000	5321811.98860000000
9	NA-588	Surface	399114.64920000000	5321731.98860000000
10	NA-289	Surface	398924.64920000000	5321801.98860000000
11	NA-549	Surface	399234.64920000000	5321741.98860000000
12	NA-566	Surface	398894.64920000000	5321731.98860000000
13	NA-586	Surface	399094.64920000000	5321731.98860000000
14	NA-484	Surface	399064.64920000000	5321751.98860000000
15	NA-427	Surface	399214.64920000000	5321771.98860000000
16	NA-557	Surface	399314.64920000000	5321741.98860000000
17	NA-247	Surface	398954.64920000000	5321811.98860000000
18	NA-257	Surface	399054.64920000000	5321811.98860000000
19	NA-829	Surface	398974.64920000000	5321661.98860000000
20	NA-419	Surface	399134.64920000000	5321771.98860000000
21	NA-197	Surface	399294.64920000000	5321831.98860000000
22	NA-319	Surface	399244.64920000000	5321801.98860000000
23	NA-290	Surface	398934.64920000000	5321801.98860000000
24	NA-809	Surface	398934.64920000000	5321671.98860000000
25	NA-414	Surface	399084.64920000000	5321771.98860000000
26	NA-777	Surface	398834.64920000000	5321681.98860000000
27	NA-2	Surface	399254.64920000000	5321911.98860000000
28	NA-311	Surface	399164.64920000000	5321801.98860000000
29	NA-358	Surface	399224.64920000000	5321791.98860000000
30	NA-789	Surface	398954.64920000000	5321681.98860000000
31	NA-659	Surface	398784.64920000000	5321711.98860000000
32	NA-656	Surface	398754.64920000000	5321711.98860000000
33	NA-130	Surface	399234.64920000000	5321851.98860000000
34	NA-89	Surface	399164.64920000000	5321861.98860000000
35	NA-389	Surface	399164.64920000000	5321781.98860000000
36	NA-382	Surface	399094.64920000000	5321781.98860000000
37	NA-186	Surface	399184.64920000000	5321831.98860000000
38	NA-730	Surface	399044.64920000000	5321701.98860000000
39	NA-431	Surface	399254.64920000000	5321771.98860000000
40	NA-463	Surface	399244.64920000000	5321761.98860000000
41	NA-397	Surface	399244.64920000000	5321781.98860000000
42	NA-651	Surface	399244.64920000000	5321721.98860000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	NA-92	Surface	399194.64920000000	5321861.98860000000
44	NA-66	Surface	399254.64920000000	5321871.98860000000
45	NA-152	Surface	399144.64920000000	5321841.98860000000
46	NA-31	Surface	399304.64920000000	5321891.98860000000
47	NA-355	Surface	399194.64920000000	5321791.98860000000
48	NA-86	Surface	399134.64920000000	5321861.98860000000
49	NA-393	Surface	399204.64920000000	5321781.98860000000
50	NA-309	Surface	399144.64920000000	5321801.98860000000
51	NA-100	Surface	399274.64920000000	5321861.98860000000
52	NA-166	Surface	399284.64920000000	5321841.98860000000
53	NA-767	Surface	399044.64920000000	5321691.98860000000
54	NA-59	Surface	399424.64920000000	5321881.98860000000
55	NA-98	Surface	399254.64920000000	5321861.98860000000
56	NA-128	Surface	399214.64920000000	5321851.98860000000
57	NA-409	Surface	398844.64920000000	5321771.98860000000
58	NA-291	Surface	398944.64920000000	5321801.98860000000
59	NA-521	Surface	398914.64920000000	5321741.98860000000
60	NA-764	Surface	399014.64920000000	5321691.98860000000
61	NA-528	Subsurface	399024.64920000000	5321741.98860000000
62	NA-737	Subsurface	399114.64920000000	5321701.98860000000
63	NA-318	Subsurface	399234.64920000000	5321801.98860000000
64	NA-676	Subsurface	398954.64920000000	5321711.98860000000
65	NA-591	Subsurface	399144.64920000000	5321731.98860000000
66	NA-568	Reserved	398914.64920000000	5321731.98860000000
67	NA-167	Reserved	399294.64920000000	5321841.98860000000
68	NA-808	Reserved	398924.64920000000	5321671.98860000000
69	NA-497	Reserved	399194.64920000000	5321751.98860000000
70	NA-106	Reserved	399334.64920000000	5321861.98860000000
71	NA-605	Reserved	399284.64920000000	5321731.98860000000
72	NA-49	Reserved	399304.64920000000	5321881.98860000000
73	NA-519	Reserved	398894.64920000000	5321741.98860000000
74	NA-286	Reserved	398894.64920000000	5321801.98860000000
75	NA-337	Reserved	399014.64920000000	5321791.98860000000
76	NA-196	Reserved	399284.64920000000	5321831.98860000000
77	NA-562	Reserved	398854.64920000000	5321731.98860000000
78	NA-628	Reserved	398994.64920000000	5321721.98860000000
79	NA-699	Reserved	399234.64920000000	5321711.98860000000
80	NA-258	Reserved	399104.64920000000	5321811.98860000000
81	NA-483	Reserved	399054.64920000000	5321751.98860000000
82	NA-719	Reserved	398934.64920000000	5321701.98860000000
83	NA-177	Reserved	399394.64920000000	5321841.98860000000
84	NA-205	Reserved	399374.64920000000	5321831.98860000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	NA-665	Reserved	398844.64920000000	5321711.98860000000
86	NA-361	Reserved	399254.64920000000	5321791.98860000000
87	NA-112	Reserved	399394.64920000000	5321861.98860000000
88	NA-700	Reserved	399244.64920000000	5321711.98860000000
89	NA-193	Reserved	399254.64920000000	5321831.98860000000
90	NA-616	Reserved	398874.64920000000	5321721.98860000000
91	NA-490	Reserved	399124.64920000000	5321751.98860000000
92	NA-551	Reserved	399254.64920000000	5321741.98860000000
93	NA-391	Reserved	399184.64920000000	5321781.98860000000
94	NA-121	Reserved	399144.64920000000	5321851.98860000000
95	NA-191	Reserved	399234.64920000000	5321831.98860000000
96	NA-248	Reserved	398964.64920000000	5321811.98860000000
97	NA-57	Reserved	399404.64920000000	5321881.98860000000
98	NA-835	Reserved	398934.64920000000	5321641.98860000000
99	NA-765	Reserved	399024.64920000000	5321691.98860000000
100	NA-653	Reserved	399264.64920000000	5321721.98860000000
101	NA-241	Reserved	399344.64920000000	5321821.98860000000
102	NA-523	Reserved	398934.64920000000	5321741.98860000000
103	NA-365	Reserved	399294.64920000000	5321791.98860000000
104	NA-223	Reserved	399164.64920000000	5321821.98860000000
105	NA-768	Reserved	399054.64920000000	5321691.98860000000
106	NA-599	Reserved	399224.64920000000	5321731.98860000000
107	NA-462	Reserved	399234.64920000000	5321761.98860000000
108	NA-36	Reserved	399394.64920000000	5321891.98860000000
109	NA-363	Reserved	399274.64920000000	5321791.98860000000
110	NA-721	Reserved	398954.64920000000	5321701.98860000000
111	NA-218	Reserved	399114.64920000000	5321821.98860000000
112	NA-583	Reserved	399064.64920000000	5321731.98860000000
113	NA-342	Reserved	399064.64920000000	5321791.98860000000
114	NA-360	Reserved	399244.64920000000	5321791.98860000000
115	NA-254	Reserved	399024.64920000000	5321811.98860000000
116	NA-461	Reserved	399224.64920000000	5321761.98860000000
117	NA-111	Reserved	399384.64920000000	5321861.98860000000
118	NA-510	Reserved	399324.64920000000	5321751.98860000000
119	NA-784	Reserved	398904.64920000000	5321681.98860000000
120	NA-348	Reserved	399124.64920000000	5321791.98860000000
121	NA-440	Reserved	398824.64920000000	5321761.98860000000
122	NA-624	Reserved	398954.64920000000	5321721.98860000000
123	NA-781	Reserved	398874.64920000000	5321681.98860000000
124	NA-432	Reserved	399264.64920000000	5321771.98860000000
125	NA-184	Reserved	399164.64920000000	5321831.98860000000
126	NA-752	Reserved	398894.64920000000	5321691.98860000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	NA-731	Reserved	399054.64920000000	5321701.98860000000
128	NA-563	Reserved	398864.64920000000	5321731.98860000000
129	NA-44	Reserved	399254.64920000000	5321881.98860000000
130	NA-619	Reserved	398904.64920000000	5321721.98860000000
131	NA-535	Reserved	399094.64920000000	5321741.98860000000
132	NA-674	Reserved	398934.64920000000	5321711.98860000000
133	NA-505	Reserved	399274.64920000000	5321751.98860000000
134	NA-437	Reserved	399314.64920000000	5321771.98860000000
135	NA-161	Reserved	399234.64920000000	5321841.98860000000
136	NA-482	Reserved	399044.64920000000	5321751.98860000000
137	NA-118	Reserved	399114.64920000000	5321851.98860000000
138	NA-439	Reserved	399334.64920000000	5321771.98860000000
139	NA-502	Reserved	399244.64920000000	5321751.98860000000
140	NA-346	Reserved	399104.64920000000	5321791.98860000000
141	NA-641	Reserved	399124.64920000000	5321721.98860000000
142	NA-449	Reserved	399104.64920000000	5321761.98860000000
143	NA-204	Reserved	399364.64920000000	5321831.98860000000
144	NA-552	Reserved	399264.64920000000	5321741.98860000000
145	NA-629	Reserved	399004.64920000000	5321721.98860000000
146	NA-627	Reserved	398984.64920000000	5321721.98860000000
147	NA-350	Reserved	399144.64920000000	5321791.98860000000
148	NA-14	Reserved	399274.64920000000	5321901.98860000000
149	NA-198	Reserved	399304.64920000000	5321831.98860000000
150	NA-647	Reserved	399204.64920000000	5321721.98860000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	WC-182	Surface	403555.15970000000	5322721.32140000000
2	WC-212	Surface	403525.15970000000	5322711.32140000000
3	WC-284	Surface	403595.15970000000	5322691.32140000000
4	WC-223	Surface	403305.15970000000	5322701.32140000000
5	WC-175	Surface	403485.15970000000	5322721.32140000000
6	WC-295	Surface	403395.15970000000	5322681.32140000000
7	WC-507	Surface	403625.15970000000	5322601.32140000000
8	WC-424	Surface	403545.15970000000	5322641.32140000000
9	WC-307	Surface	403515.15970000000	5322681.32140000000
10	WC-520	Surface	403625.15970000000	5322591.32140000000
11	WC-262	Surface	403375.15970000000	5322691.32140000000
12	WC-513	Surface	403555.15970000000	5322591.32140000000
13	WC-485	Surface	403545.15970000000	5322611.32140000000
14	WC-365	Surface	403505.15970000000	5322661.32140000000
15	WC-224	Surface	403315.15970000000	5322701.32140000000
16	WC-106	Surface	403365.15970000000	5322741.32140000000
17	WC-156	Surface	403295.15970000000	5322721.32140000000
18	WC-203	Surface	403435.15970000000	5322711.32140000000
19	WC-512	Surface	403545.15970000000	5322591.32140000000
20	WC-500	Surface	403555.15970000000	5322601.32140000000
21	WC-166	Surface	403395.15970000000	5322721.32140000000
22	WC-480	Surface	403495.15970000000	5322611.32140000000
23	WC-486	Surface	403555.15970000000	5322611.32140000000
24	WC-413	Surface	403435.15970000000	5322641.32140000000
25	WC-496	Surface	403515.15970000000	5322601.32140000000
26	WC-483	Surface	403525.15970000000	5322611.32140000000
27	WC-315	Surface	403595.15970000000	5322681.32140000000
28	WC-461	Surface	403465.15970000000	5322621.32140000000
29	WC-267	Surface	403425.15970000000	5322691.32140000000
30	WC-459	Surface	403445.15970000000	5322621.32140000000
31	WC-494	Surface	403495.15970000000	5322601.32140000000
32	WC-251	Surface	403585.15970000000	5322701.32140000000
33	WC-39	Surface	403355.15970000000	5322781.32140000000
34	WC-117	Surface	403555.15970000000	5322741.32140000000
35	WC-465	Surface	403505.15970000000	5322621.32140000000
36	WC-419	Surface	403495.15970000000	5322641.32140000000
37	WC-456	Surface	403625.15970000000	5322631.32140000000
38	WC-468	Surface	403535.15970000000	5322621.32140000000
39	WC-31	Surface	403565.15970000000	5322791.32140000000
40	WC-17	Surface	403365.15970000000	5322801.32140000000
41	WC-26	Surface	403355.15970000000	5322791.32140000000
42	WC-471	Surface	403565.15970000000	5322621.32140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	WC-338	Surface	403525.15970000000	5322671.32140000000
44	WC-396	Surface	403535.15970000000	5322651.32140000000
45	WC-398	Surface	403555.15970000000	5322651.32140000000
46	WC-205	Surface	403455.15970000000	5322711.32140000000
47	WC-250	Surface	403575.15970000000	5322701.32140000000
48	WC-230	Surface	403375.15970000000	5322701.32140000000
49	WC-189	Surface	403295.15970000000	5322711.32140000000
50	WC-448	Surface	403545.15970000000	5322631.32140000000
51	WC-273	Surface	403485.15970000000	5322691.32140000000
52	WC-161	Surface	403345.15970000000	5322721.32140000000
53	WC-528	Surface	403605.15970000000	5322571.32140000000
54	WC-254	Surface	403295.15970000000	5322691.32140000000
55	WC-221	Surface	403285.15970000000	5322701.32140000000
56	WC-237	Surface	403445.15970000000	5322701.32140000000
57	WC-123	Surface	403615.15970000000	5322741.32140000000
58	WC-515	Surface	403575.15970000000	5322591.32140000000
59	WC-257	Surface	403325.15970000000	5322691.32140000000
60	WC-34	Surface	403595.15970000000	5322791.32140000000
61	WC-151	Subsurface	403575.15970000000	5322731.32140000000
62	WC-193	Subsurface	403335.15970000000	5322711.32140000000
63	WC-384	Subsurface	403415.15970000000	5322651.32140000000
64	WC-54	Subsurface	403365.15970000000	5322771.32140000000
65	WC-56	Subsurface	403385.15970000000	5322771.32140000000
66	WC-232	Reserved	403395.15970000000	5322701.32140000000
67	WC-178	Reserved	403515.15970000000	5322721.32140000000
68	WC-47	Reserved	403585.15970000000	5322781.32140000000
69	WC-490	Reserved	403595.15970000000	5322611.32140000000
70	WC-499	Reserved	403545.15970000000	5322601.32140000000
71	WC-149	Reserved	403555.15970000000	5322731.32140000000
72	WC-92	Reserved	403425.15970000000	5322751.32140000000
73	WC-41	Reserved	403375.15970000000	5322781.32140000000
74	WC-220	Reserved	403605.15970000000	5322711.32140000000
75	WC-115	Reserved	403455.15970000000	5322741.32140000000
76	WC-274	Reserved	403495.15970000000	5322691.32140000000
77	WC-3	Reserved	403585.15970000000	5322831.32140000000
78	WC-89	Reserved	403395.15970000000	5322751.32140000000
79	WC-322	Reserved	403365.15970000000	5322671.32140000000
80	WC-390	Reserved	403475.15970000000	5322651.32140000000
81	WC-264	Reserved	403395.15970000000	5322691.32140000000
82	WC-215	Reserved	403555.15970000000	5322711.32140000000
83	WC-45	Reserved	403565.15970000000	5322781.32140000000
84	WC-502	Reserved	403575.15970000000	5322601.32140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	WC-94	Reserved	403565.15970000000	5322751.32140000000
86	WC-385	Reserved	403425.15970000000	5322651.32140000000
87	WC-104	Reserved	403345.15970000000	5322741.32140000000
88	WC-327	Reserved	403415.15970000000	5322671.32140000000
89	WC-195	Reserved	403355.15970000000	5322711.32140000000
90	WC-432	Reserved	403365.15970000000	5322631.32140000000
91	WC-108	Reserved	403385.15970000000	5322741.32140000000
92	WC-16	Reserved	403355.15970000000	5322801.32140000000
93	WC-4	Reserved	403565.15970000000	5322821.32140000000
94	WC-211	Reserved	403515.15970000000	5322711.32140000000
95	WC-127	Reserved	403335.15970000000	5322731.32140000000
96	WC-458	Reserved	403385.15970000000	5322621.32140000000
97	WC-514	Reserved	403565.15970000000	5322591.32140000000
98	WC-239	Reserved	403465.15970000000	5322701.32140000000
99	WC-373	Reserved	403585.15970000000	5322661.32140000000
100	WC-508	Reserved	403505.15970000000	5322591.32140000000
101	WC-281	Reserved	403565.15970000000	5322691.32140000000
102	WC-325	Reserved	403395.15970000000	5322671.32140000000
103	WC-491	Reserved	403605.15970000000	5322611.32140000000
104	WC-199	Reserved	403395.15970000000	5322711.32140000000
105	WC-96	Reserved	403585.15970000000	5322751.32140000000
106	WC-516	Reserved	403585.15970000000	5322591.32140000000
107	WC-12	Reserved	403575.15970000000	5322811.32140000000
108	WC-449	Reserved	403555.15970000000	5322631.32140000000
109	WC-359	Reserved	403445.15970000000	5322661.32140000000
110	WC-482	Reserved	403515.15970000000	5322611.32140000000
111	WC-33	Reserved	403585.15970000000	5322791.32140000000
112	WC-137	Reserved	403435.15970000000	5322731.32140000000
113	WC-103	Reserved	403335.15970000000	5322741.32140000000
114	WC-245	Reserved	403525.15970000000	5322701.32140000000
115	WC-234	Reserved	403415.15970000000	5322701.32140000000
116	WC-247	Reserved	403545.15970000000	5322701.32140000000
117	WC-495	Reserved	403505.15970000000	5322601.32140000000
118	WC-297	Reserved	403415.15970000000	5322681.32140000000
119	WC-279	Reserved	403545.15970000000	5322691.32140000000
120	WC-207	Reserved	403475.15970000000	5322711.32140000000
121	WC-439	Reserved	403455.15970000000	5322631.32140000000
122	WC-467	Reserved	403525.15970000000	5322621.32140000000
123	WC-288	Reserved	403325.15970000000	5322681.32140000000
124	WC-235	Reserved	403425.15970000000	5322701.32140000000
125	WC-350	Reserved	403355.15970000000	5322661.32140000000
126	WC-438	Reserved	403445.15970000000	5322631.32140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	WC-381	Reserved	403385.15970000000	5322651.32140000000
128	WC-498	Reserved	403535.15970000000	5322601.32140000000
129	WC-80	Reserved	403615.15970000000	5322761.32140000000
130	WC-335	Reserved	403495.15970000000	5322671.32140000000
131	WC-388	Reserved	403455.15970000000	5322651.32140000000
132	WC-20	Reserved	403565.15970000000	5322801.32140000000
133	WC-361	Reserved	403465.15970000000	5322661.32140000000
134	WC-416	Reserved	403465.15970000000	5322641.32140000000
135	WC-122	Reserved	403605.15970000000	5322741.32140000000
136	WC-415	Reserved	403455.15970000000	5322641.32140000000
137	WC-474	Reserved	403595.15970000000	5322621.32140000000
138	WC-479	Reserved	403485.15970000000	5322611.32140000000
139	WC-426	Reserved	403565.15970000000	5322641.32140000000
140	WC-255	Reserved	403305.15970000000	5322691.32140000000
141	WC-422	Reserved	403525.15970000000	5322641.32140000000
142	WC-286	Reserved	403305.15970000000	5322681.32140000000
143	WC-74	Reserved	403415.15970000000	5322761.32140000000
144	WC-81	Reserved	403315.15970000000	5322751.32140000000
145	WC-14	Reserved	403595.15970000000	5322811.32140000000
146	WC-198	Reserved	403385.15970000000	5322711.32140000000
147	WC-176	Reserved	403495.15970000000	5322721.32140000000
148	WC-283	Reserved	403585.15970000000	5322691.32140000000
149	WC-142	Reserved	403485.15970000000	5322731.32140000000
150	WC-437	Reserved	403435.15970000000	5322631.32140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	MP-290	Surface	396955.13530000000	5321861.87100000000
2	MP-277	Surface	396955.13530000000	5321871.87100000000
3	MP-324	Surface	396845.13530000000	5321821.87100000000
4	MP-307	Surface	396885.13530000000	5321841.87100000000
5	MP-228	Surface	397025.13530000000	5321921.87100000000
6	MP-112	Surface	397075.13530000000	5321981.87100000000
7	MP-168	Surface	397175.13530000000	5321961.87100000000
8	MP-339	Surface	396905.13530000000	5321811.87100000000
9	MP-108	Surface	397325.13530000000	5321991.87100000000
10	MP-289	Surface	396945.13530000000	5321861.87100000000
11	MP-276	Surface	396945.13530000000	5321871.87100000000
12	MP-266	Surface	396985.13530000000	5321881.87100000000
13	MP-318	Surface	396895.13530000000	5321831.87100000000
14	MP-90	Surface	397145.13530000000	5321991.87100000000
15	MP-23	Surface	397085.13530000000	5322031.87100000000
16	MP-173	Surface	397225.13530000000	5321961.87100000000
17	MP-130	Surface	397285.13530000000	5321981.87100000000
18	MP-57	Surface	397055.13530000000	5322001.87100000000
19	MP-255	Surface	397015.13530000000	5321891.87100000000
20	MP-212	Surface	397225.13530000000	5321941.87100000000
21	MP-311	Surface	396925.13530000000	5321841.87100000000
22	MP-100	Surface	397245.13530000000	5321991.87100000000
23	MP-205	Surface	397155.13530000000	5321941.87100000000
24	MP-202	Surface	397055.13530000000	5321941.87100000000
25	MP-207	Surface	397175.13530000000	5321941.87100000000
26	MP-179	Surface	397285.13530000000	5321961.87100000000
27	MP-25	Surface	397105.13530000000	5322031.87100000000
28	MP-322	Surface	396935.13530000000	5321831.87100000000
29	MP-195	Surface	397235.13530000000	5321951.87100000000
30	MP-344	Surface	396885.13530000000	5321801.87100000000
31	MP-293	Surface	396985.13530000000	5321861.87100000000
32	MP-137	Surface	397055.13530000000	5321971.87100000000
33	MP-342	Surface	396865.13530000000	5321801.87100000000
34	MP-151	Surface	397235.13530000000	5321971.87100000000
35	MP-222	Surface	397195.13530000000	5321931.87100000000
36	MP-221	Surface	397185.13530000000	5321931.87100000000
37	MP-192	Surface	397205.13530000000	5321951.87100000000
38	MP-345	Surface	396895.13530000000	5321801.87100000000
39	MP-118	Surface	397165.13530000000	5321981.87100000000
40	MP-282	Surface	397005.13530000000	5321871.87100000000
41	MP-124	Surface	397225.13530000000	5321981.87100000000
42	MP-284	Surface	397025.13530000000	5321871.87100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	MP-104	Surface	397285.13530000000	5321991.87100000000
44	MP-241	Surface	396985.13530000000	5321901.87100000000
45	MP-218	Surface	397045.13530000000	5321931.87100000000
46	MP-177	Surface	397265.13530000000	5321961.87100000000
47	MP-327	Surface	396875.13530000000	5321821.87100000000
48	MP-317	Surface	396885.13530000000	5321831.87100000000
49	MP-16	Surface	397095.13530000000	5322041.87100000000
50	MP-117	Surface	397155.13530000000	5321981.87100000000
51	MP-158	Surface	397305.13530000000	5321971.87100000000
52	MP-153	Surface	397255.13530000000	5321971.87100000000
53	MP-58	Surface	397065.13530000000	5322001.87100000000
54	MP-323	Surface	396835.13530000000	5321821.87100000000
55	MP-51	Surface	397155.13530000000	5322011.87100000000
56	MP-160	Surface	397325.13530000000	5321971.87100000000
57	MP-56	Surface	397045.13530000000	5322001.87100000000
58	MP-29	Surface	397145.13530000000	5322031.87100000000
59	MP-170	Surface	397195.13530000000	5321961.87100000000
60	MP-80	Surface	397045.13530000000	5321991.87100000000
61	MP-252	Subsurface	396985.13530000000	5321891.87100000000
62	MP-21	Subsurface	397065.13530000000	5322031.87100000000
63	MP-300	Subsurface	396925.13530000000	5321851.87100000000
64	MP-163	Subsurface	397065.13530000000	5321961.87100000000
65	MP-93	Subsurface	397175.13530000000	5321991.87100000000
66	MP-302	Reserved	396975.13530000000	5321851.87100000000
67	MP-102	Reserved	397265.13530000000	5321991.87100000000
68	MP-283	Reserved	397015.13530000000	5321871.87100000000
69	MP-157	Reserved	397295.13530000000	5321971.87100000000
70	MP-316	Reserved	396875.13530000000	5321831.87100000000
71	MP-227	Reserved	397015.13530000000	5321921.87100000000
72	MP-214	Reserved	397245.13530000000	5321941.87100000000
73	MP-278	Reserved	396965.13530000000	5321871.87100000000
74	MP-314	Reserved	396855.13530000000	5321831.87100000000
75	MP-280	Reserved	396985.13530000000	5321871.87100000000
76	MP-328	Reserved	396885.13530000000	5321821.87100000000
77	MP-240	Reserved	396975.13530000000	5321901.87100000000
78	MP-3	Reserved	397125.13530000000	5322071.87100000000
79	MP-132	Reserved	397305.13530000000	5321981.87100000000
80	MP-267	Reserved	396995.13530000000	5321881.87100000000
81	MP-198	Reserved	397265.13530000000	5321951.87100000000
82	MP-67	Reserved	397155.13530000000	5322001.87100000000
83	MP-159	Reserved	397315.13530000000	5321971.87100000000
84	MP-251	Reserved	396975.13530000000	5321891.87100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	MP-136	Reserved	397045.13530000000	5321971.87100000000
86	MP-341	Reserved	396855.13530000000	5321801.87100000000
87	MP-248	Reserved	396945.13530000000	5321891.87100000000
88	MP-193	Reserved	397215.13530000000	5321951.87100000000
89	MP-107	Reserved	397315.13530000000	5321991.87100000000
90	MP-41	Reserved	397055.13530000000	5322011.87100000000
91	MP-253	Reserved	396995.13530000000	5321891.87100000000
92	MP-125	Reserved	397235.13530000000	5321981.87100000000
93	MP-234	Reserved	397005.13530000000	5321911.87100000000
94	MP-5	Reserved	397105.13530000000	5322061.87100000000
95	MP-187	Reserved	397155.13530000000	5321951.87100000000
96	MP-269	Reserved	397015.13530000000	5321881.87100000000
97	MP-49	Reserved	397135.13530000000	5322011.87100000000
98	MP-294	Reserved	396995.13530000000	5321861.87100000000
99	MP-190	Reserved	397185.13530000000	5321951.87100000000
100	MP-147	Reserved	397195.13530000000	5321971.87100000000
101	MP-82	Reserved	397065.13530000000	5321991.87100000000
102	MP-128	Reserved	397265.13530000000	5321981.87100000000
103	MP-182	Reserved	397045.13530000000	5321951.87100000000
104	MP-319	Reserved	396905.13530000000	5321831.87100000000
105	MP-15	Reserved	397085.13530000000	5322041.87100000000
106	MP-297	Reserved	396895.13530000000	5321851.87100000000
107	MP-338	Reserved	396895.13530000000	5321811.87100000000
108	MP-162	Reserved	397055.13530000000	5321961.87100000000
109	MP-10	Reserved	397105.13530000000	5322051.87100000000
110	MP-348	Reserved	396875.13530000000	5321791.87100000000
111	MP-208	Reserved	397185.13530000000	5321941.87100000000
112	MP-224	Reserved	397215.13530000000	5321931.87100000000
113	MP-127	Reserved	397255.13530000000	5321981.87100000000
114	MP-165	Reserved	397145.13530000000	5321961.87100000000
115	MP-134	Reserved	397325.13530000000	5321981.87100000000
116	MP-155	Reserved	397275.13530000000	5321971.87100000000
117	MP-167	Reserved	397165.13530000000	5321961.87100000000
118	MP-244	Reserved	397015.13530000000	5321901.87100000000
119	MP-150	Reserved	397225.13530000000	5321971.87100000000
120	MP-139	Reserved	397075.13530000000	5321971.87100000000
121	MP-166	Reserved	397155.13530000000	5321961.87100000000
122	MP-138	Reserved	397065.13530000000	5321971.87100000000
123	MP-143	Reserved	397155.13530000000	5321971.87100000000
124	MP-113	Reserved	397085.13530000000	5321981.87100000000
125	MP-101	Reserved	397255.13530000000	5321991.87100000000
126	MP-31	Reserved	397065.13530000000	5322021.87100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	MP-30	Reserved	397055.13530000000	5322021.87100000000
128	MP-296	Reserved	397015.13530000000	5321861.87100000000
129	MP-4	Reserved	397095.13530000000	5322061.87100000000
130	MP-47	Reserved	397115.13530000000	5322011.87100000000
131	MP-34	Reserved	397095.13530000000	5322021.87100000000
132	MP-200	Reserved	397035.13530000000	5321941.87100000000
133	MP-304	Reserved	396995.13530000000	5321851.87100000000
134	MP-246	Reserved	397035.13530000000	5321901.87100000000
135	MP-60	Reserved	397085.13530000000	5322001.87100000000
136	MP-70	Reserved	397185.13530000000	5322001.87100000000
137	MP-169	Reserved	397185.13530000000	5321961.87100000000
138	MP-149	Reserved	397215.13530000000	5321971.87100000000
139	MP-123	Reserved	397215.13530000000	5321981.87100000000
140	MP-135	Reserved	397335.13530000000	5321981.87100000000
141	MP-180	Reserved	397295.13530000000	5321961.87100000000
142	MP-260	Reserved	396925.13530000000	5321881.87100000000
143	MP-259	Reserved	396915.13530000000	5321881.87100000000
144	MP-18	Reserved	397115.13530000000	5322041.87100000000
145	MP-312	Reserved	396935.13530000000	5321841.87100000000
146	MP-7	Reserved	397125.13530000000	5322061.87100000000
147	MP-331	Reserved	396915.13530000000	5321821.87100000000
148	MP-250	Reserved	396965.13530000000	5321891.87100000000
149	MP-105	Reserved	397295.13530000000	5321991.87100000000
150	MP-141	Reserved	397135.13530000000	5321971.87100000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	EN-213	Surface	405539.23070000000	5321409.18940000000
2	EN-6	Surface	405589.23070000000	5321489.18940000000
3	EN-335	Surface	405669.23070000000	5321369.18940000000
4	EN-361	Surface	405659.23070000000	5321359.18940000000
5	EN-430	Surface	405399.23070000000	5321329.18940000000
6	EN-280	Surface	405319.23070000000	5321379.18940000000
7	EN-512	Surface	405359.23070000000	5321299.18940000000
8	EN-599	Surface	405189.23070000000	5321249.18940000000
9	EN-462	Surface	405439.23070000000	5321319.18940000000
10	EN-264	Surface	405459.23070000000	5321389.18940000000
11	EN-484	Surface	405369.23070000000	5321309.18940000000
12	EN-364	Surface	405299.23070000000	5321349.18940000000
13	EN-147	Surface	405569.23070000000	5321429.18940000000
14	EN-137	Surface	405469.23070000000	5321429.18940000000
15	EN-657	Surface	405149.23070000000	5321209.18940000000
16	EN-637	Surface	405089.23070000000	5321219.18940000000
17	EN-710	Surface	405099.23070000000	5321149.18940000000
18	EN-220	Surface	405659.23070000000	5321409.18940000000
19	EN-297	Surface	405489.23070000000	5321379.18940000000
20	EN-80	Surface	405489.23070000000	5321449.18940000000
21	EN-289	Surface	405409.23070000000	5321379.18940000000
22	EN-42	Surface	405609.23070000000	5321469.18940000000
23	EN-321	Surface	405429.23070000000	5321369.18940000000
24	EN-296	Surface	405479.23070000000	5321379.18940000000
25	EN-408	Surface	405459.23070000000	5321339.18940000000
26	EN-464	Surface	405459.23070000000	5321319.18940000000
27	EN-528	Surface	405679.23070000000	5321299.18940000000
28	EN-496	Surface	405639.23070000000	5321309.18940000000
29	EN-417	Surface	405679.23070000000	5321339.18940000000
30	EN-223	Surface	405689.23070000000	5321409.18940000000
31	EN-593	Surface	405669.23070000000	5321259.18940000000
32	EN-246	Surface	405639.23070000000	5321399.18940000000
33	EN-34	Surface	405529.23070000000	5321469.18940000000
34	EN-598	Surface	405179.23070000000	5321249.18940000000
35	EN-540	Surface	405339.23070000000	5321289.18940000000
36	EN-262	Surface	405439.23070000000	5321389.18940000000
37	EN-597	Surface	405709.23070000000	5321259.18940000000
38	EN-123	Surface	405629.23070000000	5321439.18940000000
39	EN-646	Surface	405209.23070000000	5321219.18940000000
40	EN-466	Surface	405479.23070000000	5321319.18940000000
41	EN-52	Surface	405709.23070000000	5321469.18940000000
42	EN-344	Surface	405369.23070000000	5321359.18940000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	EN-118	Surface	405579.23070000000	5321439.18940000000
44	EN-400	Surface	405379.23070000000	5321339.18940000000
45	EN-325	Surface	405469.23070000000	5321369.18940000000
46	EN-178	Surface	405549.23070000000	5321419.18940000000
47	EN-245	Surface	405629.23070000000	5321399.18940000000
48	EN-567	Surface	405689.23070000000	5321279.18940000000
49	EN-520	Surface	405439.23070000000	5321299.18940000000
50	EN-589	Surface	405249.23070000000	5321259.18940000000
51	EN-547	Surface	405439.23070000000	5321289.18940000000
52	EN-300	Surface	405519.23070000000	5321379.18940000000
53	EN-319	Surface	405409.23070000000	5321369.18940000000
54	EN-28	Surface	405699.23070000000	5321479.18940000000
55	EN-117	Surface	405569.23070000000	5321439.18940000000
56	EN-179	Surface	405559.23070000000	5321419.18940000000
57	EN-27	Surface	405689.23070000000	5321479.18940000000
58	EN-171	Surface	405479.23070000000	5321419.18940000000
59	EN-639	Surface	405109.23070000000	5321219.18940000000
60	EN-276	Surface	405659.23070000000	5321389.18940000000
61	EN-12	Subsurface	405519.23070000000	5321479.18940000000
62	EN-312	Subsurface	405339.23070000000	5321369.18940000000
63	EN-142	Subsurface	405519.23070000000	5321429.18940000000
64	EN-33	Subsurface	405519.23070000000	5321469.18940000000
65	EN-376	Subsurface	405419.23070000000	5321349.18940000000
66	EN-549	Reserved	405659.23070000000	5321289.18940000000
67	EN-702	Reserved	405129.23070000000	5321169.18940000000
68	EN-472	Reserved	405679.23070000000	5321319.18940000000
69	EN-51	Reserved	405699.23070000000	5321469.18940000000
70	EN-150	Reserved	405599.23070000000	5321429.18940000000
71	EN-433	Reserved	405429.23070000000	5321329.18940000000
72	EN-129	Reserved	405689.23070000000	5321439.18940000000
73	EN-434	Reserved	405439.23070000000	5321329.18940000000
74	EN-392	Reserved	405299.23070000000	5321339.18940000000
75	EN-39	Reserved	405579.23070000000	5321469.18940000000
76	EN-499	Reserved	405669.23070000000	5321309.18940000000
77	EN-513	Reserved	405369.23070000000	5321299.18940000000
78	EN-384	Reserved	405499.23070000000	5321349.18940000000
79	EN-255	Reserved	405369.23070000000	5321389.18940000000
80	EN-140	Reserved	405499.23070000000	5321429.18940000000
81	EN-133	Reserved	405429.23070000000	5321429.18940000000
82	EN-281	Reserved	405329.23070000000	5321379.18940000000
83	EN-139	Reserved	405489.23070000000	5321429.18940000000
84	EN-523	Reserved	405629.23070000000	5321299.18940000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	EN-551	Reserved	405679.23070000000	5321289.18940000000
86	EN-343	Reserved	405359.23070000000	5321359.18940000000
87	EN-573	Reserved	405249.23070000000	5321269.18940000000
88	EN-459	Reserved	405409.23070000000	5321319.18940000000
89	EN-91	Reserved	405599.23070000000	5321449.18940000000
90	EN-180	Reserved	405569.23070000000	5321419.18940000000
91	EN-55	Reserved	405499.23070000000	5321459.18940000000
92	EN-176	Reserved	405529.23070000000	5321419.18940000000
93	EN-165	Reserved	405419.23070000000	5321419.18940000000
94	EN-349	Reserved	405419.23070000000	5321359.18940000000
95	EN-31	Reserved	405499.23070000000	5321469.18940000000
96	EN-419	Reserved	405289.23070000000	5321329.18940000000
97	EN-533	Reserved	405269.23070000000	5321289.18940000000
98	EN-505	Reserved	405289.23070000000	5321299.18940000000
99	EN-316	Reserved	405379.23070000000	5321369.18940000000
100	EN-373	Reserved	405389.23070000000	5321349.18940000000
101	EN-608	Reserved	405679.23070000000	5321249.18940000000
102	EN-644	Reserved	405189.23070000000	5321219.18940000000
103	EN-427	Reserved	405369.23070000000	5321329.18940000000
104	EN-64	Reserved	405589.23070000000	5321459.18940000000
105	EN-188	Reserved	405649.23070000000	5321419.18940000000
106	EN-338	Reserved	405309.23070000000	5321359.18940000000
107	EN-442	Reserved	405649.23070000000	5321329.18940000000
108	EN-45	Reserved	405639.23070000000	5321469.18940000000
109	EN-369	Reserved	405349.23070000000	5321349.18940000000
110	EN-322	Reserved	405439.23070000000	5321369.18940000000
111	EN-534	Reserved	405279.23070000000	5321289.18940000000
112	EN-558	Reserved	405269.23070000000	5321279.18940000000
113	EN-294	Reserved	405459.23070000000	5321379.18940000000
114	EN-665	Reserved	405079.23070000000	5321199.18940000000
115	EN-709	Reserved	405129.23070000000	5321159.18940000000
116	EN-122	Reserved	405619.23070000000	5321439.18940000000
117	EN-626	Reserved	405179.23070000000	5321229.18940000000
118	EN-553	Reserved	405699.23070000000	5321289.18940000000
119	EN-71	Reserved	405659.23070000000	5321459.18940000000
120	EN-163	Reserved	405399.23070000000	5321419.18940000000
121	EN-623	Reserved	405709.23070000000	5321239.18940000000
122	EN-407	Reserved	405449.23070000000	5321339.18940000000
123	EN-411	Reserved	405489.23070000000	5321339.18940000000
124	EN-293	Reserved	405449.23070000000	5321379.18940000000
125	EN-538	Reserved	405319.23070000000	5321289.18940000000
126	EN-619	Reserved	405239.23070000000	5321239.18940000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	EN-100	Reserved	405689.23070000000	5321449.18940000000
128	EN-432	Reserved	405419.23070000000	5321329.18940000000
129	EN-524	Reserved	405639.23070000000	5321299.18940000000
130	EN-393	Reserved	405309.23070000000	5321339.18940000000
131	EN-279	Reserved	405689.23070000000	5321389.18940000000
132	EN-72	Reserved	405669.23070000000	5321459.18940000000
133	EN-482	Reserved	405349.23070000000	5321309.18940000000
134	EN-456	Reserved	405379.23070000000	5321319.18940000000
135	EN-475	Reserved	405279.23070000000	5321309.18940000000
136	EN-11	Reserved	405709.23070000000	5321489.18940000000
137	EN-57	Reserved	405519.23070000000	5321459.18940000000
138	EN-109	Reserved	405489.23070000000	5321439.18940000000
139	EN-85	Reserved	405539.23070000000	5321449.18940000000
140	EN-596	Reserved	405699.23070000000	5321259.18940000000
141	EN-266	Reserved	405479.23070000000	5321389.18940000000
142	EN-275	Reserved	405649.23070000000	5321389.18940000000
143	EN-184	Reserved	405609.23070000000	5321419.18940000000
144	EN-110	Reserved	405499.23070000000	5321439.18940000000
145	EN-311	Reserved	405329.23070000000	5321369.18940000000
146	EN-228	Reserved	405389.23070000000	5321399.18940000000
147	EN-318	Reserved	405399.23070000000	5321369.18940000000
148	EN-674	Reserved	405169.23070000000	5321199.18940000000
149	EN-218	Reserved	405639.23070000000	5321409.18940000000
150	EN-224	Reserved	405699.23070000000	5321409.18940000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	MG-594	Surface	398612.16120000000	5315245.08550000000
2	MG-374	Surface	398342.16120000000	5315445.08550000000
3	MG-46	Surface	398192.16120000000	5315635.08550000000
4	MG-231	Surface	398402.16120000000	5315495.08550000000
5	MG-253	Surface	398232.16120000000	5315485.08550000000
6	MG-359	Surface	398402.16120000000	5315455.08550000000
7	MG-380	Surface	398402.16120000000	5315445.08550000000
8	MG-309	Surface	398462.16120000000	5315475.08550000000
9	MG-515	Surface	398592.16120000000	5315325.08550000000
10	MG-17	Surface	398202.16120000000	5315675.08550000000
11	MG-220	Surface	398292.16120000000	5315495.08550000000
12	MG-302	Surface	398392.16120000000	5315475.08550000000
13	MG-329	Surface	398362.16120000000	5315465.08550000000
14	MG-154	Surface	398292.16120000000	5315515.08550000000
15	MG-25	Surface	398212.16120000000	5315665.08550000000
16	MG-394	Surface	398362.16120000000	5315435.08550000000
17	MG-528	Surface	398502.16120000000	5315305.08550000000
18	MG-100	Surface	398202.16120000000	5315545.08550000000
19	MG-504	Surface	398592.16120000000	5315335.08550000000
20	MG-549	Surface	398572.16120000000	5315295.08550000000
21	MG-186	Surface	398302.16120000000	5315505.08550000000
22	MG-276	Surface	398462.16120000000	5315485.08550000000
23	MG-269	Surface	398392.16120000000	5315485.08550000000
24	MG-510	Surface	398542.16120000000	5315325.08550000000
25	MG-286	Surface	398232.16120000000	5315475.08550000000
26	MG-170	Surface	398572.16120000000	5315515.08550000000
27	MG-155	Surface	398422.16120000000	5315515.08550000000
28	MG-492	Surface	398562.16120000000	5315345.08550000000
29	MG-363	Surface	398512.16120000000	5315455.08550000000
30	MG-16	Surface	398192.16120000000	5315675.08550000000
31	MG-552	Surface	398602.16120000000	5315295.08550000000
32	MG-271	Surface	398412.16120000000	5315485.08550000000
33	MG-86	Surface	398202.16120000000	5315565.08550000000
34	MG-238	Surface	398472.16120000000	5315495.08550000000
35	MG-57	Surface	398202.16120000000	5315615.08550000000
36	MG-192	Surface	398432.16120000000	5315505.08550000000
37	MG-395	Surface	398372.16120000000	5315435.08550000000
38	MG-467	Surface	398482.16120000000	5315365.08550000000
39	MG-277	Surface	398472.16120000000	5315485.08550000000
40	MG-555	Surface	398632.16120000000	5315295.08550000000
41	MG-571	Surface	398572.16120000000	5315275.08550000000
42	MG-465	Surface	398532.16120000000	5315375.08550000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	MG-6	Surface	398212.16120000000	5315695.08550000000
44	MG-529	Surface	398512.16120000000	5315305.08550000000
45	MG-304	Surface	398412.16120000000	5315475.08550000000
46	MG-45	Surface	398182.16120000000	5315635.08550000000
47	MG-318	Surface	398252.16120000000	5315465.08550000000
48	MG-230	Surface	398392.16120000000	5315495.08550000000
49	MG-39	Surface	398172.16120000000	5315645.08550000000
50	MG-283	Surface	398572.16120000000	5315485.08550000000
51	MG-229	Surface	398382.16120000000	5315495.08550000000
52	MG-535	Surface	398572.16120000000	5315305.08550000000
53	MG-330	Surface	398372.16120000000	5315465.08550000000
54	MG-156	Surface	398432.16120000000	5315515.08550000000
55	MG-327	Surface	398342.16120000000	5315465.08550000000
56	MG-61	Surface	398192.16120000000	5315605.08550000000
57	MG-120	Surface	398232.16120000000	5315525.08550000000
58	MG-466	Surface	398542.16120000000	5315375.08550000000
59	MG-481	Surface	398542.16120000000	5315355.08550000000
60	MG-70	Surface	398232.16120000000	5315595.08550000000
61	MG-583	Subsurface	398602.16120000000	5315265.08550000000
62	MG-137	Subsurface	398562.16120000000	5315525.08550000000
63	MG-217	Subsurface	398262.16120000000	5315495.08550000000
64	MG-566	Subsurface	398622.16120000000	5315285.08550000000
65	MG-106	Subsurface	398182.16120000000	5315535.08550000000
66	MG-461	Reserved	398492.16120000000	5315375.08550000000
67	MG-332	Reserved	398392.16120000000	5315465.08550000000
68	MG-115	Reserved	398602.16120000000	5315535.08550000000
69	MG-200	Reserved	398512.16120000000	5315505.08550000000
70	MG-517	Reserved	398502.16120000000	5315315.08550000000
71	MG-490	Reserved	398542.16120000000	5315345.08550000000
72	MG-584	Reserved	398612.16120000000	5315265.08550000000
73	MG-222	Reserved	398312.16120000000	5315495.08550000000
74	MG-476	Reserved	398492.16120000000	5315355.08550000000
75	MG-59	Reserved	398222.16120000000	5315615.08550000000
76	MG-108	Reserved	398202.16120000000	5315535.08550000000
77	MG-588	Reserved	398592.16120000000	5315255.08550000000
78	MG-349	Reserved	398302.16120000000	5315455.08550000000
79	MG-114	Reserved	398262.16120000000	5315535.08550000000
80	MG-514	Reserved	398582.16120000000	5315325.08550000000
81	MG-160	Reserved	398472.16120000000	5315515.08550000000
82	MG-573	Reserved	398592.16120000000	5315275.08550000000
83	MG-382	Reserved	398422.16120000000	5315445.08550000000
84	MG-7	Reserved	398222.16120000000	5315695.08550000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	MG-371	Reserved	398312.16120000000	5315445.08550000000
86	MG-471	Reserved	398522.16120000000	5315365.08550000000
87	MG-410	Reserved	398362.16120000000	5315425.08550000000
88	MG-257	Reserved	398272.16120000000	5315485.08550000000
89	MG-530	Reserved	398522.16120000000	5315305.08550000000
90	MG-369	Reserved	398292.16120000000	5315445.08550000000
91	MG-338	Reserved	398512.16120000000	5315465.08550000000
92	MG-9	Reserved	398182.16120000000	5315685.08550000000
93	MG-446	Reserved	398352.16120000000	5315395.08550000000
94	MG-268	Reserved	398382.16120000000	5315485.08550000000
95	MG-596	Reserved	398632.16120000000	5315245.08550000000
96	MG-82	Reserved	398232.16120000000	5315575.08550000000
97	MG-216	Reserved	398252.16120000000	5315495.08550000000
98	MG-544	Reserved	398522.16120000000	5315295.08550000000
99	MG-578	Reserved	398642.16120000000	5315275.08550000000
100	MG-239	Reserved	398482.16120000000	5315495.08550000000
101	MG-145	Reserved	398202.16120000000	5315515.08550000000
102	MG-306	Reserved	398432.16120000000	5315475.08550000000
103	MG-445	Reserved	398342.16120000000	5315395.08550000000
104	MG-343	Reserved	398562.16120000000	5315465.08550000000
105	MG-240	Reserved	398492.16120000000	5315495.08550000000
106	MG-146	Reserved	398212.16120000000	5315515.08550000000
107	MG-93	Reserved	398202.16120000000	5315555.08550000000
108	MG-463	Reserved	398512.16120000000	5315375.08550000000
109	MG-449	Reserved	398382.16120000000	5315395.08550000000
110	MG-259	Reserved	398292.16120000000	5315485.08550000000
111	MG-30	Reserved	398172.16120000000	5315655.08550000000
112	MG-591	Reserved	398622.16120000000	5315255.08550000000
113	MG-454	Reserved	398512.16120000000	5315395.08550000000
114	MG-462	Reserved	398502.16120000000	5315375.08550000000
115	MG-74	Reserved	398212.16120000000	5315585.08550000000
116	MG-398	Reserved	398402.16120000000	5315435.08550000000
117	MG-183	Reserved	398272.16120000000	5315505.08550000000
118	MG-425	Reserved	398372.16120000000	5315415.08550000000
119	MG-542	Reserved	398642.16120000000	5315305.08550000000
120	MG-451	Reserved	398402.16120000000	5315395.08550000000
121	MG-489	Reserved	398532.16120000000	5315345.08550000000
122	MG-569	Reserved	398652.16120000000	5315285.08550000000
123	MG-40	Reserved	398182.16120000000	5315645.08550000000
124	MG-551	Reserved	398592.16120000000	5315295.08550000000
125	MG-424	Reserved	398362.16120000000	5315415.08550000000
126	MG-207	Reserved	398582.16120000000	5315505.08550000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	MG-498	Reserved	398532.16120000000	5315335.08550000000
128	MG-547	Reserved	398552.16120000000	5315295.08550000000
129	MG-5	Reserved	398202.16120000000	5315695.08550000000
130	MG-575	Reserved	398612.16120000000	5315275.08550000000
131	MG-527	Reserved	398602.16120000000	5315315.08550000000
132	MG-206	Reserved	398572.16120000000	5315505.08550000000
133	MG-98	Reserved	398182.16120000000	5315545.08550000000
134	MG-218	Reserved	398272.16120000000	5315495.08550000000
135	MG-167	Reserved	398542.16120000000	5315515.08550000000
136	MG-367	Reserved	398272.16120000000	5315445.08550000000
137	MG-188	Reserved	398392.16120000000	5315505.08550000000
138	MG-161	Reserved	398482.16120000000	5315515.08550000000
139	MG-427	Reserved	398392.16120000000	5315415.08550000000
140	MG-71	Reserved	398182.16120000000	5315585.08550000000
141	MG-364	Reserved	398522.16120000000	5315455.08550000000
142	MG-176	Reserved	398202.16120000000	5315505.08550000000
143	MG-83	Reserved	398242.16120000000	5315575.08550000000
144	MG-397	Reserved	398392.16120000000	5315435.08550000000
145	MG-507	Reserved	398512.16120000000	5315325.08550000000
146	MG-64	Reserved	398222.16120000000	5315605.08550000000
147	MG-221	Reserved	398302.16120000000	5315495.08550000000
148	MG-162	Reserved	398492.16120000000	5315515.08550000000
149	MG-244	Reserved	398542.16120000000	5315495.08550000000
150	MG-405	Reserved	398312.16120000000	5315425.08550000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	SB-191	Surface	399308.53020000000	5300559.42090000000
2	SB-275	Surface	399268.53020000000	5300409.42090000000
3	SB-319	Surface	399308.53020000000	5300349.42090000000
4	SB-255	Surface	399308.53020000000	5300449.42090000000
5	SB-428	Surface	399358.53020000000	5300249.42090000000
6	SB-251	Surface	399268.53020000000	5300449.42090000000
7	SB-159	Surface	399318.53020000000	5300609.42090000000
8	SB-192	Surface	399318.53020000000	5300559.42090000000
9	SB-145	Surface	399318.53020000000	5300629.42090000000
10	SB-433	Surface	399408.53020000000	5300249.42090000000
11	SB-408	Surface	399348.53020000000	5300269.42090000000
12	SB-241	Surface	399288.53020000000	5300469.42090000000
13	SB-334	Surface	399318.53020000000	5300329.42090000000
14	SB-282	Surface	399278.53020000000	5300399.42090000000
15	SB-175	Surface	399278.53020000000	5300579.42090000000
16	SB-38	Surface	399348.53020000000	5300799.42090000000
17	SB-261	Surface	399308.53020000000	5300439.42090000000
18	SB-44	Surface	399298.53020000000	5300779.42090000000
19	SB-181	Surface	399278.53020000000	5300569.42090000000
20	SB-72	Surface	399338.53020000000	5300739.42090000000
21	SB-114	Surface	399318.53020000000	5300679.42090000000
22	SB-281	Surface	399268.53020000000	5300399.42090000000
23	SB-190	Surface	399298.53020000000	5300559.42090000000
24	SB-205	Surface	399318.53020000000	5300539.42090000000
25	SB-238	Surface	399308.53020000000	5300479.42090000000
26	SB-208	Surface	399288.53020000000	5300529.42090000000
27	SB-56	Surface	399308.53020000000	5300759.42090000000
28	SB-19	Surface	399328.53020000000	5300829.42090000000
29	SB-45	Surface	399308.53020000000	5300779.42090000000
30	SB-91	Surface	399298.53020000000	5300709.42090000000
31	SB-7	Surface	399358.53020000000	5300859.42090000000
32	SB-177	Surface	399298.53020000000	5300579.42090000000
33	SB-97	Surface	399288.53020000000	5300699.42090000000
34	SB-229	Surface	399268.53020000000	5300489.42090000000
35	SB-153	Surface	399328.53020000000	5300619.42090000000
36	SB-368	Surface	399368.53020000000	5300299.42090000000
37	SB-371	Surface	399398.53020000000	5300299.42090000000
38	SB-59	Surface	399338.53020000000	5300759.42090000000
39	SB-123	Surface	399288.53020000000	5300659.42090000000
40	SB-431	Surface	399388.53020000000	5300249.42090000000
41	SB-370	Surface	399388.53020000000	5300299.42090000000
42	SB-10	Surface	399338.53020000000	5300849.42090000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	SB-90	Surface	399288.53020000000	5300709.42090000000
44	SB-309	Surface	399278.53020000000	5300359.42090000000
45	SB-228	Surface	399308.53020000000	5300499.42090000000
46	SB-372	Surface	399408.53020000000	5300299.42090000000
47	SB-197	Surface	399298.53020000000	5300549.42090000000
48	SB-31	Surface	399338.53020000000	5300809.42090000000
49	SB-158	Surface	399308.53020000000	5300609.42090000000
50	SB-299	Surface	399318.53020000000	5300379.42090000000
51	SB-57	Surface	399318.53020000000	5300759.42090000000
52	SB-353	Surface	399328.53020000000	5300309.42090000000
53	SB-42	Surface	399328.53020000000	5300789.42090000000
54	SB-401	Surface	399408.53020000000	5300279.42090000000
55	SB-134	Surface	399278.53020000000	5300639.42090000000
56	SB-339	Surface	399288.53020000000	5300319.42090000000
57	SB-399	Surface	399388.53020000000	5300279.42090000000
58	SB-244	Surface	399318.53020000000	5300469.42090000000
59	SB-168	Surface	399338.53020000000	5300599.42090000000
60	SB-369	Surface	399378.53020000000	5300299.42090000000
61	SB-5	Subsurface	399338.53020000000	5300859.42090000000
62	SB-246	Subsurface	399278.53020000000	5300459.42090000000
63	SB-322	Subsurface	399338.53020000000	5300349.42090000000
64	SB-425	Subsurface	399418.53020000000	5300259.42090000000
65	SB-149	Subsurface	399288.53020000000	5300619.42090000000
66	SB-274	Reserved	399318.53020000000	5300419.42090000000
67	SB-258	Reserved	399278.53020000000	5300439.42090000000
68	SB-230	Reserved	399278.53020000000	5300489.42090000000
69	SB-289	Reserved	399288.53020000000	5300389.42090000000
70	SB-49	Reserved	399298.53020000000	5300769.42090000000
71	SB-79	Reserved	399328.53020000000	5300729.42090000000
72	SB-365	Reserved	399338.53020000000	5300299.42090000000
73	SB-310	Reserved	399288.53020000000	5300359.42090000000
74	SB-106	Reserved	399308.53020000000	5300689.42090000000
75	SB-66	Reserved	399278.53020000000	5300739.42090000000
76	SB-29	Reserved	399318.53020000000	5300809.42090000000
77	SB-373	Reserved	399428.53020000000	5300299.42090000000
78	SB-252	Reserved	399278.53020000000	5300449.42090000000
79	SB-74	Reserved	399278.53020000000	5300729.42090000000
80	SB-119	Reserved	399308.53020000000	5300669.42090000000
81	SB-326	Reserved	399308.53020000000	5300339.42090000000
82	SB-293	Reserved	399328.53020000000	5300389.42090000000
83	SB-360	Reserved	399438.53020000000	5300309.42090000000
84	SB-312	Reserved	399308.53020000000	5300359.42090000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	SB-167	Reserved	399328.53020000000	5300599.42090000000
86	SB-30	Reserved	399328.53020000000	5300809.42090000000
87	SB-350	Reserved	399298.53020000000	5300309.42090000000
88	SB-199	Reserved	399318.53020000000	5300549.42090000000
89	SB-174	Reserved	399328.53020000000	5300589.42090000000
90	SB-226	Reserved	399288.53020000000	5300499.42090000000
91	SB-93	Reserved	399318.53020000000	5300709.42090000000
92	SB-87	Reserved	399328.53020000000	5300719.42090000000
93	SB-224	Reserved	399268.53020000000	5300499.42090000000
94	SB-164	Reserved	399298.53020000000	5300599.42090000000
95	SB-118	Reserved	399298.53020000000	5300669.42090000000
96	SB-147	Reserved	399338.53020000000	5300629.42090000000
97	SB-152	Reserved	399318.53020000000	5300619.42090000000
98	SB-151	Reserved	399308.53020000000	5300619.42090000000
99	SB-88	Reserved	399268.53020000000	5300709.42090000000
100	SB-133	Reserved	399328.53020000000	5300649.42090000000
101	SB-195	Reserved	399278.53020000000	5300549.42090000000
102	SB-185	Reserved	399318.53020000000	5300569.42090000000
103	SB-146	Reserved	399328.53020000000	5300629.42090000000
104	SB-62	Reserved	399308.53020000000	5300749.42090000000
105	SB-206	Reserved	399268.53020000000	5300529.42090000000
106	SB-24	Reserved	399318.53020000000	5300819.42090000000
107	SB-248	Reserved	399298.53020000000	5300459.42090000000
108	SB-138	Reserved	399318.53020000000	5300639.42090000000
109	SB-347	Reserved	399368.53020000000	5300319.42090000000
110	SB-324	Reserved	399288.53020000000	5300339.42090000000
111	SB-377	Reserved	399318.53020000000	5300289.42090000000
112	SB-374	Reserved	399438.53020000000	5300299.42090000000
113	SB-110	Reserved	399278.53020000000	5300679.42090000000
114	SB-216	Reserved	399308.53020000000	5300519.42090000000
115	SB-131	Reserved	399308.53020000000	5300649.42090000000
116	SB-240	Reserved	399278.53020000000	5300469.42090000000
117	SB-71	Reserved	399328.53020000000	5300739.42090000000
118	SB-1	Reserved	399348.53020000000	5300869.42090000000
119	SB-86	Reserved	399318.53020000000	5300719.42090000000
120	SB-301	Reserved	399268.53020000000	5300369.42090000000
121	SB-245	Reserved	399268.53020000000	5300459.42090000000
122	SB-352	Reserved	399318.53020000000	5300309.42090000000
123	SB-170	Reserved	399288.53020000000	5300589.42090000000
124	SB-338	Reserved	399358.53020000000	5300329.42090000000
125	SB-290	Reserved	399298.53020000000	5300389.42090000000
126	SB-268	Reserved	399318.53020000000	5300429.42090000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	SB-402	Reserved	399418.53020000000	5300279.42090000000
128	SB-292	Reserved	399318.53020000000	5300389.42090000000
129	SB-341	Reserved	399308.53020000000	5300319.42090000000
130	SB-41	Reserved	399318.53020000000	5300789.42090000000
131	SB-429	Reserved	399368.53020000000	5300249.42090000000
132	SB-376	Reserved	399308.53020000000	5300289.42090000000
133	SB-95	Reserved	399268.53020000000	5300699.42090000000
134	SB-416	Reserved	399428.53020000000	5300269.42090000000
135	SB-17	Reserved	399358.53020000000	5300839.42090000000
136	SB-22	Reserved	399358.53020000000	5300829.42090000000
137	SB-272	Reserved	399298.53020000000	5300419.42090000000
138	SB-392	Reserved	399318.53020000000	5300279.42090000000
139	SB-78	Reserved	399318.53020000000	5300729.42090000000
140	SB-47	Reserved	399328.53020000000	5300779.42090000000
141	SB-157	Reserved	399298.53020000000	5300609.42090000000
142	SB-98	Reserved	399298.53020000000	5300699.42090000000
143	SB-336	Reserved	399338.53020000000	5300329.42090000000
144	SB-407	Reserved	399338.53020000000	5300269.42090000000
145	SB-201	Reserved	399278.53020000000	5300539.42090000000
146	SB-233	Reserved	399308.53020000000	5300489.42090000000
147	SB-148	Reserved	399278.53020000000	5300619.42090000000
148	SB-409	Reserved	399358.53020000000	5300269.42090000000
149	SB-210	Reserved	399308.53020000000	5300529.42090000000
150	SB-280	Reserved	399318.53020000000	5300409.42090000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	HC-98	Surface	397695.24310000000	5298121.47440000000
2	HC-174	Surface	397635.24310000000	5298031.47440000000
3	HC-71	Surface	397825.24310000000	5298171.47440000000
4	HC-44	Surface	397835.24310000000	5298231.47440000000
5	HC-15	Surface	397815.24310000000	5298271.47440000000
6	HC-124	Surface	397745.24310000000	5298101.47440000000
7	HC-210	Surface	397635.24310000000	5297981.47440000000
8	HC-225	Surface	397645.24310000000	5297951.47440000000
9	HC-195	Surface	397615.24310000000	5298001.47440000000
10	HC-152	Surface	397655.24310000000	5298061.47440000000
11	HC-166	Surface	397635.24310000000	5298041.47440000000
12	HC-27	Surface	397855.24310000000	5298261.47440000000
13	HC-119	Surface	397695.24310000000	5298101.47440000000
14	HC-14	Surface	397805.24310000000	5298271.47440000000
15	HC-37	Surface	397815.24310000000	5298241.47440000000
16	HC-168	Surface	397655.24310000000	5298041.47440000000
17	HC-26	Surface	397845.24310000000	5298261.47440000000
18	HC-102	Surface	397735.24310000000	5298121.47440000000
19	HC-177	Surface	397665.24310000000	5298031.47440000000
20	HC-75	Surface	397805.24310000000	5298161.47440000000
21	HC-128	Surface	397685.24310000000	5298091.47440000000
22	HC-158	Surface	397635.24310000000	5298051.47440000000
23	HC-211	Surface	397645.24310000000	5297981.47440000000
24	HC-154	Surface	397675.24310000000	5298061.47440000000
25	HC-122	Surface	397725.24310000000	5298101.47440000000
26	HC-241	Surface	397635.24310000000	5297921.47440000000
27	HC-40	Surface	397795.24310000000	5298231.47440000000
28	HC-236	Surface	397645.24310000000	5297931.47440000000
29	HC-2	Surface	397865.24310000000	5298301.47440000000
30	HC-47	Surface	397815.24310000000	5298221.47440000000
31	HC-181	Surface	397625.24310000000	5298021.47440000000
32	HC-11	Surface	397855.24310000000	5298281.47440000000
33	HC-159	Surface	397645.24310000000	5298051.47440000000
34	HC-220	Surface	397645.24310000000	5297961.47440000000
35	HC-207	Surface	397605.24310000000	5297981.47440000000
36	HC-25	Surface	397835.24310000000	5298261.47440000000
37	HC-126	Surface	397665.24310000000	5298091.47440000000
38	HC-115	Surface	397655.24310000000	5298101.47440000000
39	HC-204	Surface	397635.24310000000	5297991.47440000000
40	HC-56	Surface	397805.24310000000	5298201.47440000000
41	HC-39	Surface	397835.24310000000	5298241.47440000000
42	HC-206	Surface	397655.24310000000	5297991.47440000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	HC-55	Surface	397795.24310000000	5298201.47440000000
44	HC-226	Surface	397655.24310000000	5297951.47440000000
45	HC-197	Surface	397635.24310000000	5298001.47440000000
46	HC-180	Surface	397615.24310000000	5298021.47440000000
47	HC-19	Surface	397855.24310000000	5298271.47440000000
48	HC-237	Surface	397655.24310000000	5297931.47440000000
49	HC-12	Surface	397865.24310000000	5298281.47440000000
50	HC-45	Surface	397795.24310000000	5298221.47440000000
51	HC-178	Surface	397675.24310000000	5298031.47440000000
52	HC-110	Surface	397715.24310000000	5298111.47440000000
53	HC-91	Surface	397735.24310000000	5298131.47440000000
54	HC-17	Surface	397835.24310000000	5298271.47440000000
55	HC-155	Surface	397685.24310000000	5298061.47440000000
56	HC-36	Surface	397805.24310000000	5298241.47440000000
57	HC-89	Surface	397715.24310000000	5298131.47440000000
58	HC-80	Surface	397795.24310000000	5298151.47440000000
59	HC-123	Surface	397735.24310000000	5298101.47440000000
60	HC-240	Surface	397625.24310000000	5297921.47440000000
61	HC-209	Subsurface	397625.24310000000	5297981.47440000000
62	HC-223	Subsurface	397625.24310000000	5297951.47440000000
63	HC-148	Subsurface	397695.24310000000	5298071.47440000000
64	HC-16	Subsurface	397825.24310000000	5298271.47440000000
65	HC-133	Subsurface	397735.24310000000	5298091.47440000000
66	HC-104	Reserved	397755.24310000000	5298121.47440000000
67	HC-157	Reserved	397705.24310000000	5298061.47440000000
68	HC-131	Reserved	397715.24310000000	5298091.47440000000
69	HC-160	Reserved	397655.24310000000	5298051.47440000000
70	HC-167	Reserved	397645.24310000000	5298041.47440000000
71	HC-92	Reserved	397745.24310000000	5298131.47440000000
72	HC-28	Reserved	397865.24310000000	5298261.47440000000
73	HC-5	Reserved	397865.24310000000	5298291.47440000000
74	HC-186	Reserved	397595.24310000000	5298011.47440000000
75	HC-228	Reserved	397625.24310000000	5297941.47440000000
76	HC-101	Reserved	397725.24310000000	5298121.47440000000
77	HC-79	Reserved	397785.24310000000	5298151.47440000000
78	HC-38	Reserved	397825.24310000000	5298241.47440000000
79	HC-34	Reserved	397845.24310000000	5298251.47440000000
80	HC-35	Reserved	397795.24310000000	5298241.47440000000
81	HC-156	Reserved	397695.24310000000	5298061.47440000000
82	HC-57	Reserved	397815.24310000000	5298201.47440000000
83	HC-43	Reserved	397825.24310000000	5298231.47440000000
84	HC-179	Reserved	397605.24310000000	5298021.47440000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	HC-52	Reserved	397815.24310000000	5298211.47440000000
86	HC-222	Reserved	397665.24310000000	5297961.47440000000
87	HC-96	Reserved	397785.24310000000	5298131.47440000000
88	HC-10	Reserved	397845.24310000000	5298281.47440000000
89	HC-69	Reserved	397805.24310000000	5298171.47440000000
90	HC-192	Reserved	397655.24310000000	5298011.47440000000
91	HC-163	Reserved	397685.24310000000	5298051.47440000000
92	HC-189	Reserved	397625.24310000000	5298011.47440000000
93	HC-161	Reserved	397665.24310000000	5298051.47440000000
94	HC-20	Reserved	397865.24310000000	5298271.47440000000
95	HC-134	Reserved	397645.24310000000	5298081.47440000000
96	HC-70	Reserved	397815.24310000000	5298171.47440000000
97	HC-31	Reserved	397815.24310000000	5298251.47440000000
98	HC-61	Reserved	397815.24310000000	5298191.47440000000
99	HC-238	Reserved	397665.24310000000	5297931.47440000000
100	HC-164	Reserved	397695.24310000000	5298051.47440000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	WS-149	Surface	385302.20030000000	5304949.11140000000
2	WS-119	Surface	385262.20030000000	5304979.11140000000
3	WS-144	Surface	385252.20030000000	5304949.11140000000
4	WS-135	Surface	385252.20030000000	5304959.11140000000
5	WS-118	Surface	385252.20030000000	5304979.11140000000
6	WS-51	Surface	385182.20030000000	5305049.11140000000
7	WS-185	Surface	385332.20030000000	5304919.11140000000
8	WS-102	Surface	385242.20030000000	5304999.11140000000
9	WS-13	Surface	385182.20030000000	5305099.11140000000
10	WS-115	Surface	385222.20030000000	5304979.11140000000
11	WS-125	Surface	385232.20030000000	5304969.11140000000
12	WS-162	Surface	385222.20030000000	5304929.11140000000
13	WS-34	Surface	385192.20030000000	5305069.11140000000
14	WS-229	Surface	385252.20030000000	5304869.11140000000
15	WS-8	Surface	385202.20030000000	5305119.11140000000
16	WS-139	Surface	385292.20030000000	5304959.11140000000
17	WS-121	Surface	385282.20030000000	5304979.11140000000
18	WS-187	Surface	385232.20030000000	5304909.11140000000
19	WS-226	Surface	385282.20030000000	5304879.11140000000
20	WS-195	Surface	385312.20030000000	5304909.11140000000
21	WS-167	Surface	385272.20030000000	5304929.11140000000
22	WS-156	Surface	385272.20030000000	5304939.11140000000
23	WS-50	Surface	385172.20030000000	5305049.11140000000
24	WS-180	Surface	385282.20030000000	5304919.11140000000
25	WS-56	Surface	385232.20030000000	5305049.11140000000
26	WS-87	Surface	385252.20030000000	5305019.11140000000
27	WS-111	Surface	385262.20030000000	5304989.11140000000
28	WS-215	Surface	385272.20030000000	5304889.11140000000
29	WS-12	Surface	385212.20030000000	5305109.11140000000
30	WS-83	Surface	385212.20030000000	5305019.11140000000
31	WS-136	Surface	385262.20030000000	5304959.11140000000
32	WS-186	Surface	385222.20030000000	5304909.11140000000
33	WS-59	Surface	385172.20030000000	5305039.11140000000
34	WS-137	Surface	385272.20030000000	5304959.11140000000
35	WS-146	Surface	385272.20030000000	5304949.11140000000
36	WS-192	Surface	385282.20030000000	5304909.11140000000
37	WS-19	Surface	385182.20030000000	5305089.11140000000
38	WS-172	Surface	385322.20030000000	5304929.11140000000
39	WS-148	Surface	385292.20030000000	5304949.11140000000
40	WS-158	Surface	385292.20030000000	5304939.11140000000
41	WS-6	Surface	385212.20030000000	5305129.11140000000
42	WS-124	Surface	385222.20030000000	5304969.11140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	WS-95	Surface	385252.20030000000	5305009.11140000000
44	WS-189	Surface	385252.20030000000	5304909.11140000000
45	WS-82	Surface	385202.20030000000	5305019.11140000000
46	WS-116	Surface	385232.20030000000	5304979.11140000000
47	WS-145	Surface	385262.20030000000	5304949.11140000000
48	WS-31	Surface	385232.20030000000	5305079.11140000000
49	WS-207	Surface	385302.20030000000	5304899.11140000000
50	WS-175	Surface	385232.20030000000	5304919.11140000000
51	WS-2	Surface	385202.20030000000	5305139.11140000000
52	WS-36	Surface	385212.20030000000	5305069.11140000000
53	WS-163	Surface	385232.20030000000	5304929.11140000000
54	WS-18	Surface	385172.20030000000	5305089.11140000000
55	WS-22	Surface	385212.20030000000	5305089.11140000000
56	WS-26	Surface	385182.20030000000	5305079.11140000000
57	WS-131	Surface	385292.20030000000	5304969.11140000000
58	WS-104	Surface	385262.20030000000	5304999.11140000000
59	WS-217	Surface	385292.20030000000	5304889.11140000000
60	WS-126	Surface	385242.20030000000	5304969.11140000000
61	WS-84	Subsurface	385222.20030000000	5305019.11140000000
62	WS-177	Subsurface	385252.20030000000	5304919.11140000000
63	WS-65	Subsurface	385232.20030000000	5305039.11140000000
64	WS-43	Subsurface	385202.20030000000	5305059.11140000000
65	WS-169	Subsurface	385292.20030000000	5304929.11140000000
66	WS-79	Reserved	385172.20030000000	5305019.11140000000
67	WS-198	Reserved	385342.20030000000	5304909.11140000000
68	WS-164	Reserved	385242.20030000000	5304929.11140000000
69	WS-220	Reserved	385322.20030000000	5304889.11140000000
70	WS-128	Reserved	385262.20030000000	5304969.11140000000
71	WS-190	Reserved	385262.20030000000	5304909.11140000000
72	WS-49	Reserved	385162.20030000000	5305049.11140000000
73	WS-72	Reserved	385202.20030000000	5305029.11140000000
74	WS-203	Reserved	385262.20030000000	5304899.11140000000
75	WS-194	Reserved	385302.20030000000	5304909.11140000000
76	WS-159	Reserved	385302.20030000000	5304939.11140000000
77	WS-112	Reserved	385272.20030000000	5304989.11140000000
78	WS-127	Reserved	385252.20030000000	5304969.11140000000
79	WS-222	Reserved	385242.20030000000	5304879.11140000000
80	WS-171	Reserved	385312.20030000000	5304929.11140000000
81	WS-66	Reserved	385242.20030000000	5305039.11140000000
82	WS-179	Reserved	385272.20030000000	5304919.11140000000
83	WS-14	Reserved	385192.20030000000	5305099.11140000000
84	WS-134	Reserved	385242.20030000000	5304959.11140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	WS-92	Reserved	385222.20030000000	5305009.11140000000
86	WS-86	Reserved	385242.20030000000	5305019.11140000000
87	WS-70	Reserved	385182.20030000000	5305029.11140000000
88	WS-101	Reserved	385232.20030000000	5304999.11140000000
89	WS-221	Reserved	385232.20030000000	5304879.11140000000
90	WS-160	Reserved	385312.20030000000	5304939.11140000000
91	WS-40	Reserved	385172.20030000000	5305059.11140000000
92	WS-225	Reserved	385272.20030000000	5304879.11140000000
93	WS-123	Reserved	385302.20030000000	5304979.11140000000
94	WS-182	Reserved	385302.20030000000	5304919.11140000000
95	WS-60	Reserved	385182.20030000000	5305039.11140000000
96	WS-206	Reserved	385292.20030000000	5304899.11140000000
97	WS-93	Reserved	385232.20030000000	5305009.11140000000
98	WS-129	Reserved	385272.20030000000	5304969.11140000000
99	WS-208	Reserved	385312.20030000000	5304899.11140000000
100	WS-53	Reserved	385202.20030000000	5305049.11140000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	JB-142	Surface	381220.03090000000	5309104.49570000000
2	JB-65	Surface	381420.03090000000	5309184.49570000000
3	JB-208	Surface	381120.03090000000	5309064.49570000000
4	JB-261	Surface	380890.03090000000	5309034.49570000000
5	JB-192	Surface	381180.03090000000	5309074.49570000000
6	JB-178	Surface	381040.03090000000	5309074.49570000000
7	JB-79	Surface	381230.03090000000	5309164.49570000000
8	JB-81	Surface	381250.03090000000	5309164.49570000000
9	JB-18	Surface	381370.03090000000	5309214.49570000000
10	JB-129	Surface	381180.03090000000	5309114.49570000000
11	JB-165	Surface	381130.03090000000	5309084.49570000000
12	JB-104	Surface	381240.03090000000	5309144.49570000000
13	JB-131	Surface	381200.03090000000	5309114.49570000000
14	JB-267	Surface	380950.03090000000	5309034.49570000000
15	JB-282	Surface	380910.03090000000	5309024.49570000000
16	JB-114	Surface	381220.03090000000	5309134.49570000000
17	JB-25	Surface	381300.03090000000	5309204.49570000000
18	JB-252	Surface	381020.03090000000	5309044.49570000000
19	JB-141	Surface	381210.03090000000	5309104.49570000000
20	JB-224	Surface	381000.03090000000	5309054.49570000000
21	JB-95	Surface	381270.03090000000	5309154.49570000000
22	JB-175	Surface	381010.03090000000	5309074.49570000000
23	JB-49	Surface	381370.03090000000	5309194.49570000000
24	JB-302	Surface	380970.03090000000	5309014.49570000000
25	JB-199	Surface	381030.03090000000	5309064.49570000000
26	JB-174	Surface	381000.03090000000	5309074.49570000000
27	JB-144	Surface	381240.03090000000	5309104.49570000000
28	JB-128	Surface	381260.03090000000	5309124.49570000000
29	JB-158	Surface	381060.03090000000	5309084.49570000000
30	JB-171	Surface	381190.03090000000	5309084.49570000000
31	JB-301	Surface	380960.03090000000	5309014.49570000000
32	JB-235	Surface	381170.03090000000	5309054.49570000000
33	JB-50	Surface	381380.03090000000	5309194.49570000000
34	JB-260	Surface	380880.03090000000	5309034.49570000000
35	JB-166	Surface	381140.03090000000	5309084.49570000000
36	JB-3	Surface	381340.03090000000	5309224.49570000000
37	JB-250	Surface	381000.03090000000	5309044.49570000000
38	JB-289	Surface	380980.03090000000	5309024.49570000000
39	JB-145	Surface	381090.03090000000	5309094.49570000000
40	JB-245	Surface	380950.03090000000	5309044.49570000000
41	JB-293	Surface	380880.03090000000	5309014.49570000000
42	JB-97	Surface	381290.03090000000	5309154.49570000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	JB-30	Surface	381350.03090000000	5309204.49570000000
44	JB-217	Surface	380930.03090000000	5309054.49570000000
45	JB-23	Surface	381420.03090000000	5309214.49570000000
46	JB-188	Surface	381140.03090000000	5309074.49570000000
47	JB-154	Surface	381190.03090000000	5309094.49570000000
48	JB-16	Surface	381350.03090000000	5309214.49570000000
49	JB-177	Surface	381030.03090000000	5309074.49570000000
50	JB-230	Surface	381060.03090000000	5309054.49570000000
51	JB-167	Surface	381150.03090000000	5309084.49570000000
52	JB-262	Surface	380900.03090000000	5309034.49570000000
53	JB-239	Surface	380890.03090000000	5309044.49570000000
54	JB-219	Surface	380950.03090000000	5309054.49570000000
55	JB-37	Surface	381420.03090000000	5309204.49570000000
56	JB-279	Surface	380880.03090000000	5309024.49570000000
57	JB-135	Surface	381240.03090000000	5309114.49570000000
58	JB-86	Surface	381300.03090000000	5309164.49570000000
59	JB-215	Surface	381190.03090000000	5309064.49570000000
60	JB-121	Surface	381190.03090000000	5309124.49570000000
61	JB-122	Subsurface	381200.03090000000	5309124.49570000000
62	JB-51	Subsurface	381390.03090000000	5309194.49570000000
63	JB-20	Subsurface	381390.03090000000	5309214.49570000000
64	JB-181	Subsurface	381070.03090000000	5309074.49570000000
65	JB-109	Subsurface	381290.03090000000	5309144.49570000000
66	JB-68	Reserved	381240.03090000000	5309174.49570000000
67	JB-106	Reserved	381260.03090000000	5309144.49570000000
68	JB-176	Reserved	381020.03090000000	5309074.49570000000
69	JB-35	Reserved	381400.03090000000	5309204.49570000000
70	JB-48	Reserved	381360.03090000000	5309194.49570000000
71	JB-91	Reserved	381230.03090000000	5309154.49570000000
72	JB-227	Reserved	381030.03090000000	5309054.49570000000
73	JB-280	Reserved	380890.03090000000	5309024.49570000000
74	JB-87	Reserved	381310.03090000000	5309164.49570000000
75	JB-240	Reserved	380900.03090000000	5309044.49570000000
76	JB-12	Reserved	381430.03090000000	5309224.49570000000
77	JB-15	Reserved	381340.03090000000	5309214.49570000000
78	JB-202	Reserved	381060.03090000000	5309064.49570000000
79	JB-150	Reserved	381140.03090000000	5309094.49570000000
80	JB-271	Reserved	380990.03090000000	5309034.49570000000
81	JB-292	Reserved	380870.03090000000	5309014.49570000000
82	JB-76	Reserved	381320.03090000000	5309174.49570000000
83	JB-34	Reserved	381390.03090000000	5309204.49570000000
84	JB-247	Reserved	380970.03090000000	5309044.49570000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	JB-310	Reserved	380860.03090000000	5308994.49570000000
86	JB-254	Reserved	381130.03090000000	5309044.49570000000
87	JB-139	Reserved	381190.03090000000	5309104.49570000000
88	JB-287	Reserved	380960.03090000000	5309024.49570000000
89	JB-69	Reserved	381250.03090000000	5309174.49570000000
90	JB-123	Reserved	381210.03090000000	5309124.49570000000
91	JB-11	Reserved	381420.03090000000	5309224.49570000000
92	JB-101	Reserved	381210.03090000000	5309144.49570000000
93	JB-243	Reserved	380930.03090000000	5309044.49570000000
94	JB-205	Reserved	381090.03090000000	5309064.49570000000
95	JB-253	Reserved	381030.03090000000	5309044.49570000000
96	JB-222	Reserved	380980.03090000000	5309054.49570000000
97	JB-266	Reserved	380940.03090000000	5309034.49570000000
98	JB-9	Reserved	381400.03090000000	5309224.49570000000
99	JB-54	Reserved	381420.03090000000	5309194.49570000000
100	JB-116	Reserved	381240.03090000000	5309134.49570000000
101	JB-258	Reserved	380860.03090000000	5309034.49570000000
102	JB-130	Reserved	381190.03090000000	5309114.49570000000
103	JB-84	Reserved	381280.03090000000	5309164.49570000000
104	JB-137	Reserved	381170.03090000000	5309104.49570000000
105	JB-212	Reserved	381160.03090000000	5309064.49570000000
106	JB-300	Reserved	380950.03090000000	5309014.49570000000
107	JB-169	Reserved	381170.03090000000	5309084.49570000000
108	JB-78	Reserved	381220.03090000000	5309164.49570000000
109	JB-196	Reserved	381000.03090000000	5309064.49570000000
110	JB-39	Reserved	381270.03090000000	5309194.49570000000
111	JB-110	Reserved	381180.03090000000	5309134.49570000000
112	JB-59	Reserved	381290.03090000000	5309184.49570000000
113	JB-303	Reserved	380860.03090000000	5309004.49570000000
114	JB-6	Reserved	381370.03090000000	5309224.49570000000
115	JB-56	Reserved	381260.03090000000	5309184.49570000000
116	JB-149	Reserved	381130.03090000000	5309094.49570000000
117	JB-83	Reserved	381270.03090000000	5309164.49570000000
118	JB-7	Reserved	381380.03090000000	5309224.49570000000
119	JB-225	Reserved	381010.03090000000	5309054.49570000000
120	JB-146	Reserved	381100.03090000000	5309094.49570000000
121	JB-233	Reserved	381150.03090000000	5309054.49570000000
122	JB-179	Reserved	381050.03090000000	5309074.49570000000
123	JB-163	Reserved	381110.03090000000	5309084.49570000000
124	JB-31	Reserved	381360.03090000000	5309204.49570000000
125	JB-278	Reserved	380870.03090000000	5309024.49570000000
126	JB-57	Reserved	381270.03090000000	5309184.49570000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	JB-223	Reserved	380990.03090000000	5309054.49570000000
128	JB-189	Reserved	381150.03090000000	5309074.49570000000
129	JB-118	Reserved	381260.03090000000	5309134.49570000000
130	JB-288	Reserved	380970.03090000000	5309024.49570000000
131	JB-1	Reserved	381420.03090000000	5309234.49570000000
132	JB-124	Reserved	381220.03090000000	5309124.49570000000
133	JB-71	Reserved	381270.03090000000	5309174.49570000000
134	JB-275	Reserved	381130.03090000000	5309034.49570000000
135	JB-296	Reserved	380910.03090000000	5309014.49570000000
136	JB-115	Reserved	381230.03090000000	5309134.49570000000
137	JB-38	Reserved	381430.03090000000	5309204.49570000000
138	JB-2	Reserved	381330.03090000000	5309224.49570000000
139	JB-155	Reserved	381200.03090000000	5309094.49570000000
140	JB-90	Reserved	381220.03090000000	5309154.49570000000
141	JB-32	Reserved	381370.03090000000	5309204.49570000000
142	JB-67	Reserved	381440.03090000000	5309184.49570000000
143	JB-216	Reserved	380920.03090000000	5309054.49570000000
144	JB-152	Reserved	381170.03090000000	5309094.49570000000
145	JB-148	Reserved	381120.03090000000	5309094.49570000000
146	JB-220	Reserved	380960.03090000000	5309054.49570000000
147	JB-248	Reserved	380980.03090000000	5309044.49570000000
148	JB-249	Reserved	380990.03090000000	5309044.49570000000
149	JB-273	Reserved	381010.03090000000	5309034.49570000000
150	JB-161	Reserved	381090.03090000000	5309084.49570000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	SW-129	Surface	364400.70420000000	5312353.52670000000
2	SW-395	Surface	364640.70420000000	5312153.52670000000
3	SW-173	Surface	364440.70420000000	5312343.52670000000
4	SW-135	Surface	364460.70420000000	5312353.52670000000
5	SW-238	Surface	364720.70420000000	5312323.52670000000
6	SW-282	Surface	364740.70420000000	5312293.52670000000
7	SW-461	Surface	364550.70420000000	5312073.52670000000
8	SW-4	Surface	364660.70420000000	5312403.52670000000
9	SW-399	Surface	364600.70420000000	5312143.52670000000
10	SW-132	Surface	364430.70420000000	5312353.52670000000
11	SW-13	Surface	364420.70420000000	5312393.52670000000
12	SW-421	Surface	364650.70420000000	5312123.52670000000
13	SW-190	Surface	364710.70420000000	5312343.52670000000
14	SW-90	Surface	364770.70420000000	5312373.52670000000
15	SW-412	Surface	364640.70420000000	5312133.52670000000
16	SW-382	Surface	364670.70420000000	5312173.52670000000
17	SW-193	Surface	364740.70420000000	5312343.52670000000
18	SW-59	Surface	364760.70420000000	5312383.52670000000
19	SW-228	Surface	364410.70420000000	5312323.52670000000
20	SW-29	Surface	364720.70420000000	5312393.52670000000
21	SW-376	Surface	364690.70420000000	5312183.52670000000
22	SW-384	Surface	364610.70420000000	5312163.52670000000
23	SW-429	Surface	364650.70420000000	5312113.52670000000
24	SW-198	Surface	364790.70420000000	5312343.52670000000
25	SW-1	Surface	364630.70420000000	5312403.52670000000
26	SW-318	Surface	364720.70420000000	5312253.52670000000
27	SW-149	Surface	364620.70420000000	5312353.52670000000
28	SW-262	Surface	364790.70420000000	5312313.52670000000
29	SW-388	Surface	364650.70420000000	5312163.52670000000
30	SW-323	Surface	364690.70420000000	5312243.52670000000
31	SW-7	Surface	364690.70420000000	5312403.52670000000
32	SW-257	Surface	364740.70420000000	5312313.52670000000
33	SW-419	Surface	364630.70420000000	5312123.52670000000
34	SW-305	Surface	364680.70420000000	5312263.52670000000
35	SW-427	Surface	364630.70420000000	5312113.52670000000
36	SW-333	Surface	364710.70420000000	5312233.52670000000
37	SW-15	Surface	364580.70420000000	5312393.52670000000
38	SW-293	Surface	364750.70420000000	5312283.52670000000
39	SW-75	Surface	364620.70420000000	5312373.52670000000
40	SW-334	Surface	364720.70420000000	5312233.52670000000
41	SW-34	Surface	364410.70420000000	5312383.52670000000
42	SW-297	Surface	364700.70420000000	5312273.52670000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	SW-466	Surface	364600.70420000000	5312073.52670000000
44	SW-401	Surface	364620.70420000000	5312143.52670000000
45	SW-415	Surface	364590.70420000000	5312123.52670000000
46	SW-283	Surface	364750.70420000000	5312293.52670000000
47	SW-437	Surface	364570.70420000000	5312093.52670000000
48	SW-322	Surface	364680.70420000000	5312243.52670000000
49	SW-311	Surface	364740.70420000000	5312263.52670000000
50	SW-279	Surface	364710.70420000000	5312293.52670000000
51	SW-58	Surface	364750.70420000000	5312383.52670000000
52	SW-387	Surface	364640.70420000000	5312163.52670000000
53	SW-183	Surface	364640.70420000000	5312343.52670000000
54	SW-120	Surface	364720.70420000000	5312363.52670000000
55	SW-463	Surface	364570.70420000000	5312073.52670000000
56	SW-21	Surface	364640.70420000000	5312393.52670000000
57	SW-278	Surface	364700.70420000000	5312293.52670000000
58	SW-209	Surface	364480.70420000000	5312333.52670000000
59	SW-79	Surface	364660.70420000000	5312373.52670000000
60	SW-235	Surface	364690.70420000000	5312323.52670000000
61	SW-212	Subsurface	364680.70420000000	5312333.52670000000
62	SW-150	Subsurface	364630.70420000000	5312353.52670000000
63	SW-260	Subsurface	364770.70420000000	5312313.52670000000
64	SW-248	Subsurface	364390.70420000000	5312313.52670000000
65	SW-443	Subsurface	364630.70420000000	5312093.52670000000
66	SW-194	Reserved	364750.70420000000	5312343.52670000000
67	SW-385	Reserved	364620.70420000000	5312163.52670000000
68	SW-118	Reserved	364700.70420000000	5312363.52670000000
69	SW-204	Reserved	364430.70420000000	5312333.52670000000
70	SW-93	Reserved	364400.70420000000	5312363.52670000000
71	SW-448	Reserved	364570.70420000000	5312083.52670000000
72	SW-359	Reserved	364700.70420000000	5312203.52670000000
73	SW-213	Reserved	364690.70420000000	5312333.52670000000
74	SW-314	Reserved	364680.70420000000	5312253.52670000000
75	SW-78	Reserved	364650.70420000000	5312373.52670000000
76	SW-219	Reserved	364750.70420000000	5312333.52670000000
77	SW-309	Reserved	364720.70420000000	5312263.52670000000
78	SW-195	Reserved	364760.70420000000	5312343.52670000000
79	SW-33	Reserved	364400.70420000000	5312383.52670000000
80	SW-272	Reserved	364760.70420000000	5312303.52670000000
81	SW-68	Reserved	364550.70420000000	5312373.52670000000
82	SW-354	Reserved	364650.70420000000	5312203.52670000000
83	SW-16	Reserved	364590.70420000000	5312393.52670000000
84	SW-35	Reserved	364420.70420000000	5312383.52670000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	SW-424	Reserved	364600.70420000000	5312113.52670000000
86	SW-91	Reserved	364780.70420000000	5312373.52670000000
87	SW-391	Reserved	364680.70420000000	5312163.52670000000
88	SW-269	Reserved	364730.70420000000	5312303.52670000000
89	SW-316	Reserved	364700.70420000000	5312253.52670000000
90	SW-55	Reserved	364720.70420000000	5312383.52670000000
91	SW-277	Reserved	364690.70420000000	5312293.52670000000
92	SW-445	Reserved	364540.70420000000	5312083.52670000000
93	SW-414	Reserved	364660.70420000000	5312133.52670000000
94	SW-366	Reserved	364680.70420000000	5312193.52670000000
95	SW-386	Reserved	364630.70420000000	5312163.52670000000
96	SW-288	Reserved	364700.70420000000	5312283.52670000000
97	SW-449	Reserved	364580.70420000000	5312083.52670000000
98	SW-250	Reserved	364670.70420000000	5312313.52670000000
99	SW-428	Reserved	364640.70420000000	5312113.52670000000
100	SW-259	Reserved	364760.70420000000	5312313.52670000000
101	SW-364	Reserved	364660.70420000000	5312193.52670000000
102	SW-100	Reserved	364520.70420000000	5312363.52670000000
103	SW-308	Reserved	364710.70420000000	5312263.52670000000
104	SW-158	Reserved	364710.70420000000	5312353.52670000000
105	SW-261	Reserved	364780.70420000000	5312313.52670000000
106	SW-370	Reserved	364630.70420000000	5312183.52670000000
107	SW-142	Reserved	364530.70420000000	5312353.52670000000
108	SW-177	Reserved	364480.70420000000	5312343.52670000000
109	SW-349	Reserved	364690.70420000000	5312213.52670000000
110	SW-241	Reserved	364750.70420000000	5312323.52670000000
111	SW-245	Reserved	364790.70420000000	5312323.52670000000
112	SW-302	Reserved	364750.70420000000	5312273.52670000000
113	SW-151	Reserved	364640.70420000000	5312353.52670000000
114	SW-457	Reserved	364510.70420000000	5312073.52670000000
115	SW-456	Reserved	364500.70420000000	5312073.52670000000
116	SW-169	Reserved	364400.70420000000	5312343.52670000000
117	SW-162	Reserved	364750.70420000000	5312353.52670000000
118	SW-229	Reserved	364420.70420000000	5312323.52670000000
119	SW-342	Reserved	364710.70420000000	5312223.52670000000
120	SW-99	Reserved	364510.70420000000	5312363.52670000000
121	SW-337	Reserved	364660.70420000000	5312223.52670000000
122	SW-32	Reserved	364750.70420000000	5312393.52670000000
123	SW-180	Reserved	364510.70420000000	5312343.52670000000
124	SW-234	Reserved	364680.70420000000	5312323.52670000000
125	SW-70	Reserved	364570.70420000000	5312373.52670000000
126	SW-11	Reserved	364730.70420000000	5312403.52670000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	SW-52	Reserved	364690.70420000000	5312383.52670000000
128	SW-450	Reserved	364590.70420000000	5312083.52670000000
129	SW-208	Reserved	364470.70420000000	5312333.52670000000
130	SW-203	Reserved	364420.70420000000	5312333.52670000000
131	SW-436	Reserved	364640.70420000000	5312103.52670000000
132	SW-141	Reserved	364520.70420000000	5312353.52670000000
133	SW-56	Reserved	364730.70420000000	5312383.52670000000
134	SW-265	Reserved	364690.70420000000	5312303.52670000000
135	SW-268	Reserved	364720.70420000000	5312303.52670000000
136	SW-271	Reserved	364750.70420000000	5312303.52670000000
137	SW-441	Reserved	364610.70420000000	5312093.52670000000
138	SW-189	Reserved	364700.70420000000	5312343.52670000000
139	SW-104	Reserved	364560.70420000000	5312363.52670000000
140	SW-127	Reserved	364790.70420000000	5312363.52670000000
141	SW-92	Reserved	364390.70420000000	5312363.52670000000
142	SW-396	Reserved	364650.70420000000	5312153.52670000000
143	SW-315	Reserved	364690.70420000000	5312253.52670000000
144	SW-28	Reserved	364710.70420000000	5312393.52670000000
145	SW-363	Reserved	364650.70420000000	5312193.52670000000
146	SW-306	Reserved	364690.70420000000	5312263.52670000000
147	SW-352	Reserved	364630.70420000000	5312203.52670000000
148	SW-207	Reserved	364460.70420000000	5312333.52670000000
149	SW-372	Reserved	364650.70420000000	5312183.52670000000
150	SW-67	Reserved	364540.70420000000	5312373.52670000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	SC-213	Surface	355107.91410000000	5311005.03000000000
2	SC-60	Surface	355297.91410000000	5311045.03000000000
3	SC-363	Surface	355367.91410000000	5310975.03000000000
4	SC-222	Surface	355197.91410000000	5311005.03000000000
5	SC-63	Surface	355327.91410000000	5311045.03000000000
6	SC-188	Surface	355327.91410000000	5311015.03000000000
7	SC-183	Surface	355277.91410000000	5311015.03000000000
8	SC-256	Surface	355107.91410000000	5310995.03000000000
9	SC-283	Surface	355377.91410000000	5310995.03000000000
10	SC-429	Surface	355397.91410000000	5310945.03000000000
11	SC-361	Surface	355347.91410000000	5310975.03000000000
12	SC-172	Surface	355167.91410000000	5311015.03000000000
13	SC-131	Surface	355247.91410000000	5311025.03000000000
14	SC-407	Surface	355297.91410000000	5310955.03000000000
15	SC-198	Surface	355427.91410000000	5311015.03000000000
16	SC-146	Surface	355397.91410000000	5311025.03000000000
17	SC-123	Surface	355167.91410000000	5311025.03000000000
18	SC-360	Surface	355337.91410000000	5310975.03000000000
19	SC-206	Surface	355037.91410000000	5311005.03000000000
20	SC-193	Surface	355377.91410000000	5311015.03000000000
21	SC-338	Surface	355117.91410000000	5310975.03000000000
22	SC-86	Surface	355277.91410000000	5311035.03000000000
23	SC-38	Surface	355317.91410000000	5311055.03000000000
24	SC-276	Surface	355307.91410000000	5310995.03000000000
25	SC-148	Surface	355417.91410000000	5311025.03000000000
26	SC-171	Surface	355157.91410000000	5311015.03000000000
27	SC-37	Surface	355307.91410000000	5311055.03000000000
28	SC-55	Surface	355247.91410000000	5311045.03000000000
29	SC-261	Surface	355157.91410000000	5310995.03000000000
30	SC-287	Surface	355417.91410000000	5310995.03000000000
31	SC-251	Surface	355057.91410000000	5310995.03000000000
32	SC-88	Surface	355297.91410000000	5311035.03000000000
33	SC-25	Surface	355407.91410000000	5311065.03000000000
34	SC-184	Surface	355287.91410000000	5311015.03000000000
35	SC-426	Surface	355367.91410000000	5310945.03000000000
36	SC-36	Surface	355297.91410000000	5311055.03000000000
37	SC-154	Surface	354987.91410000000	5311015.03000000000
38	SC-418	Surface	355407.91410000000	5310955.03000000000
39	SC-156	Surface	355007.91410000000	5311015.03000000000
40	SC-87	Surface	355287.91410000000	5311035.03000000000
41	SC-235	Surface	355327.91410000000	5311005.03000000000
42	SC-68	Surface	355377.91410000000	5311045.03000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	SC-383	Surface	355267.91410000000	5310965.030000000000
44	SC-263	Surface	355177.91410000000	5310995.030000000000
45	SC-327	Surface	355397.91410000000	5310985.030000000000
46	SC-258	Surface	355127.91410000000	5310995.030000000000
47	SC-266	Surface	355207.91410000000	5310995.030000000000
48	SC-289	Surface	355437.91410000000	5310995.030000000000
49	SC-66	Surface	355357.91410000000	5311045.030000000000
50	SC-379	Surface	355227.91410000000	5310965.030000000000
51	SC-212	Surface	355097.91410000000	5311005.030000000000
52	SC-20	Surface	355357.91410000000	5311065.030000000000
53	SC-12	Surface	355407.91410000000	5311075.030000000000
54	SC-102	Surface	355437.91410000000	5311035.030000000000
55	SC-295	Surface	355077.91410000000	5310985.030000000000
56	SC-422	Surface	355447.91410000000	5310955.030000000000
57	SC-78	Surface	355197.91410000000	5311035.030000000000
58	SC-149	Surface	355427.91410000000	5311025.030000000000
59	SC-410	Surface	355327.91410000000	5310955.030000000000
60	SC-231	Surface	355287.91410000000	5311005.030000000000
61	SC-242	Subsurface	355397.91410000000	5311005.030000000000
62	SC-165	Subsurface	355097.91410000000	5311015.030000000000
63	SC-269	Subsurface	355237.91410000000	5310995.030000000000
64	SC-209	Subsurface	355067.91410000000	5311005.030000000000
65	SC-71	Subsurface	355407.91410000000	5311045.030000000000
66	SC-163	Reserved	355077.91410000000	5311015.030000000000
67	SC-158	Reserved	355027.91410000000	5311015.030000000000
68	SC-89	Reserved	355307.91410000000	5311035.030000000000
69	SC-97	Reserved	355387.91410000000	5311035.030000000000
70	SC-342	Reserved	355157.91410000000	5310975.030000000000
71	SC-309	Reserved	355217.91410000000	5310985.030000000000
72	SC-380	Reserved	355237.91410000000	5310965.030000000000
73	SC-225	Reserved	355227.91410000000	5311005.030000000000
74	SC-122	Reserved	355157.91410000000	5311025.030000000000
75	SC-128	Reserved	355217.91410000000	5311025.030000000000
76	SC-398	Reserved	355417.91410000000	5310965.030000000000
77	SC-14	Reserved	355427.91410000000	5311075.030000000000
78	SC-404	Reserved	355267.91410000000	5310955.030000000000
79	SC-391	Reserved	355347.91410000000	5310965.030000000000
80	SC-323	Reserved	355357.91410000000	5310985.030000000000
81	SC-406	Reserved	355287.91410000000	5310955.030000000000
82	SC-176	Reserved	355207.91410000000	5311015.030000000000
83	SC-108	Reserved	355007.91410000000	5311025.030000000000
84	SC-285	Reserved	355397.91410000000	5310995.030000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	SC-254	Reserved	355087.91410000000	5310995.030000000000
86	SC-275	Reserved	355297.91410000000	5310995.030000000000
87	SC-173	Reserved	355177.91410000000	5311015.030000000000
88	SC-27	Reserved	355427.91410000000	5311065.030000000000
89	SC-433	Reserved	355437.91410000000	5310945.030000000000
90	SC-249	Reserved	355037.91410000000	5310995.030000000000
91	SC-80	Reserved	355217.91410000000	5311035.030000000000
92	SC-1	Reserved	355387.91410000000	5311085.030000000000
93	SC-219	Reserved	355167.91410000000	5311005.030000000000
94	SC-167	Reserved	355117.91410000000	5311015.030000000000
95	SC-23	Reserved	355387.91410000000	5311065.030000000000
96	SC-322	Reserved	355347.91410000000	5310985.030000000000
97	SC-252	Reserved	355067.91410000000	5310995.030000000000
98	SC-294	Reserved	355067.91410000000	5310985.030000000000
99	SC-8	Reserved	355367.91410000000	5311075.030000000000
100	SC-331	Reserved	355437.91410000000	5310985.030000000000
101	SC-9	Reserved	355377.91410000000	5311075.030000000000
102	SC-15	Reserved	355437.91410000000	5311075.030000000000
103	SC-416	Reserved	355387.91410000000	5310955.030000000000
104	SC-431	Reserved	355417.91410000000	5310945.030000000000
105	SC-157	Reserved	355017.91410000000	5311015.030000000000
106	SC-16	Reserved	355447.91410000000	5311075.030000000000
107	SC-53	Reserved	355227.91410000000	5311045.030000000000
108	SC-121	Reserved	355147.91410000000	5311025.030000000000
109	SC-205	Reserved	355027.91410000000	5311005.030000000000
110	SC-58	Reserved	355277.91410000000	5311045.030000000000
111	SC-386	Reserved	355297.91410000000	5310965.030000000000
112	SC-3	Reserved	355407.91410000000	5311085.030000000000
113	SC-187	Reserved	355317.91410000000	5311015.030000000000
114	SC-44	Reserved	355377.91410000000	5311055.030000000000
115	SC-352	Reserved	355257.91410000000	5310975.030000000000
116	SC-59	Reserved	355287.91410000000	5311045.030000000000
117	SC-314	Reserved	355267.91410000000	5310985.030000000000
118	SC-236	Reserved	355337.91410000000	5311005.030000000000
119	SC-362	Reserved	355357.91410000000	5310975.030000000000
120	SC-140	Reserved	355337.91410000000	5311025.030000000000
121	SC-264	Reserved	355187.91410000000	5310995.030000000000
122	SC-329	Reserved	355417.91410000000	5310985.030000000000
123	SC-370	Reserved	355437.91410000000	5310975.030000000000
124	SC-211	Reserved	355087.91410000000	5311005.030000000000
125	SC-317	Reserved	355297.91410000000	5310985.030000000000
126	SC-357	Reserved	355307.91410000000	5310975.030000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
127	SC-203	Reserved	355007.91410000000	5311005.030000000000
128	SC-161	Reserved	355057.91410000000	5311015.030000000000
129	SC-32	Reserved	355257.91410000000	5311055.030000000000
130	SC-397	Reserved	355407.91410000000	5310965.030000000000
131	SC-425	Reserved	355357.91410000000	5310945.030000000000
132	SC-286	Reserved	355407.91410000000	5310995.030000000000
133	SC-21	Reserved	355367.91410000000	5311065.030000000000
134	SC-381	Reserved	355247.91410000000	5310965.030000000000
135	SC-304	Reserved	355167.91410000000	5310985.030000000000
136	SC-424	Reserved	355347.91410000000	5310945.030000000000
137	SC-378	Reserved	355217.91410000000	5310965.030000000000
138	SC-26	Reserved	355417.91410000000	5311065.030000000000
139	SC-164	Reserved	355087.91410000000	5311015.030000000000
140	SC-257	Reserved	355117.91410000000	5310995.030000000000
141	SC-129	Reserved	355227.91410000000	5311025.030000000000
142	SC-144	Reserved	355377.91410000000	5311025.030000000000
143	SC-47	Reserved	355407.91410000000	5311055.030000000000
144	SC-374	Reserved	355177.91410000000	5310965.030000000000
145	SC-166	Reserved	355107.91410000000	5311015.030000000000
146	SC-262	Reserved	355167.91410000000	5310995.030000000000
147	SC-82	Reserved	355237.91410000000	5311035.030000000000
148	SC-181	Reserved	355257.91410000000	5311015.030000000000
149	SC-306	Reserved	355187.91410000000	5310985.030000000000
150	SC-50	Reserved	355437.91410000000	5311055.030000000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	CS-142	Surface	351455.05160000000	5311854.24790000000
2	CS-194	Surface	351467.55160000000	5311849.24790000000
3	CS-7	Surface	351447.55160000000	5311869.24790000000
4	CS-100	Surface	351475.05160000000	5311859.24790000000
5	CS-53	Surface	351470.05160000000	5311864.24790000000
6	CS-140	Surface	351450.05160000000	5311854.24790000000
7	CS-82	Surface	351487.55160000000	5311861.74790000000
8	CS-185	Surface	351500.05160000000	5311851.74790000000
9	CS-20	Surface	351437.55160000000	5311866.74790000000
10	CS-74	Surface	351467.55160000000	5311861.74790000000
11	CS-179	Surface	351485.05160000000	5311851.74790000000
12	CS-36	Surface	351427.55160000000	5311864.24790000000
13	CS-103	Surface	351482.55160000000	5311859.24790000000
14	CS-101	Surface	351477.55160000000	5311859.24790000000
15	CS-218	Surface	351485.05160000000	5311846.74790000000
16	CS-66	Surface	351447.55160000000	5311861.74790000000
17	CS-58	Surface	351482.55160000000	5311864.24790000000
18	CS-134	Surface	351500.05160000000	5311856.74790000000
19	CS-24	Surface	351447.55160000000	5311866.74790000000
20	CS-106	Surface	351490.05160000000	5311859.24790000000
21	CS-105	Surface	351487.55160000000	5311859.24790000000
22	CS-44	Surface	351447.55160000000	5311864.24790000000
23	CS-3	Surface	351437.55160000000	5311869.24790000000
24	CS-204	Surface	351492.55160000000	5311849.24790000000
25	CS-176	Surface	351477.55160000000	5311851.74790000000
26	CS-71	Surface	351460.05160000000	5311861.74790000000
27	CS-120	Surface	351465.05160000000	5311856.74790000000
28	CS-10	Surface	351455.05160000000	5311869.24790000000
29	CS-166	Surface	351515.05160000000	5311854.24790000000
30	CS-190	Surface	351512.55160000000	5311851.74790000000
31	CS-2	Surface	351435.05160000000	5311869.24790000000
32	CS-119	Surface	351462.55160000000	5311856.74790000000
33	CS-157	Surface	351492.55160000000	5311854.24790000000
34	CS-205	Surface	351495.05160000000	5311849.24790000000
35	CS-46	Surface	351452.55160000000	5311864.24790000000
36	CS-219	Reserved	351487.55160000000	5311846.74790000000
37	CS-102	Subsurface	351480.05160000000	5311859.24790000000
38	CS-110	Subsurface	351500.05160000000	5311859.24790000000
39	CS-67	Subsurface	351450.05160000000	5311861.74790000000
40	CS-146	Subsurface	351465.05160000000	5311854.24790000000
41	CS-196	Subsurface	351472.55160000000	5311849.24790000000
42	CS-22	Reserved	351442.55160000000	5311866.74790000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	CS-19	Reserved	351435.05160000000	5311866.74790000000
44	CS-154	Reserved	351485.05160000000	5311854.24790000000
45	CS-177	Reserved	351480.05160000000	5311851.74790000000
46	CS-135	Reserved	351502.55160000000	5311856.74790000000
47	CS-212	Reserved	351470.05160000000	5311846.74790000000
48	CS-5	Reserved	351442.55160000000	5311869.24790000000
49	CS-51	Reserved	351465.05160000000	5311864.24790000000
50	CS-94	Reserved	351460.05160000000	5311859.24790000000
51	CS-111	Reserved	351502.55160000000	5311859.24790000000
52	CS-165	Reserved	351512.55160000000	5311854.24790000000
53	CS-80	Reserved	351482.55160000000	5311861.74790000000
54	CS-56	Reserved	351477.55160000000	5311864.24790000000
55	CS-141	Reserved	351452.55160000000	5311854.24790000000
56	CS-172	Reserved	351467.55160000000	5311851.74790000000
57	CS-33	Reserved	351470.05160000000	5311866.74790000000
58	CS-125	Reserved	351477.55160000000	5311856.74790000000
59	CS-214	Reserved	351475.05160000000	5311846.74790000000
60	CS-41	Reserved	351440.05160000000	5311864.24790000000
61	CS-191	Reserved	351515.05160000000	5311851.74790000000
62	CS-174	Reserved	351472.55160000000	5311851.74790000000
63	CS-59	Reserved	351485.05160000000	5311864.24790000000
64	CS-122	Reserved	351470.05160000000	5311856.74790000000
65	CS-84	Reserved	351492.55160000000	5311861.74790000000
66	CS-162	Reserved	351505.05160000000	5311854.24790000000
67	CS-52	Reserved	351467.55160000000	5311864.24790000000
68	CS-92	Reserved	351455.05160000000	5311859.24790000000
69	CS-118	Reserved	351460.05160000000	5311856.74790000000
70	CS-30	Reserved	351462.55160000000	5311866.74790000000
71	CS-163	Reserved	351507.55160000000	5311854.24790000000
72	CS-35	Reserved	351475.05160000000	5311866.74790000000
73	CS-200	Reserved	351482.55160000000	5311849.24790000000
74	CS-130	Reserved	351490.05160000000	5311856.74790000000
75	CS-216	Reserved	351480.05160000000	5311846.74790000000
76	CS-187	Reserved	351505.05160000000	5311851.74790000000
77	CS-155	Reserved	351487.55160000000	5311854.24790000000
78	CS-152	Reserved	351480.05160000000	5311854.24790000000
79	CS-45	Reserved	351450.05160000000	5311864.24790000000
80	CS-145	Reserved	351462.55160000000	5311854.24790000000
81	CS-15	Reserved	351467.55160000000	5311869.24790000000
82	CS-112	Reserved	351445.05160000000	5311856.74790000000
83	CS-93	Reserved	351457.55160000000	5311859.24790000000
84	CS-69	Reserved	351455.05160000000	5311861.74790000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	CS-85	Reserved	351495.05160000000	5311861.74790000000
86	CS-9	Reserved	351452.55160000000	5311869.24790000000
87	CS-133	Reserved	351497.55160000000	5311856.74790000000
88	CS-182	Reserved	351492.55160000000	5311851.74790000000
89	CS-28	Reserved	351457.55160000000	5311866.74790000000
90	CS-62	Reserved	351437.55160000000	5311861.74790000000
91	CS-186	Reserved	351502.55160000000	5311851.74790000000
92	CS-128	Reserved	351485.05160000000	5311856.74790000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
1	DM-432	Surface	444970.94020000000	5420925.94210000000
2	DM-296	Surface	444976.94020000000	5420935.94210000000
3	DM-19	Surface	445018.94020000000	5420961.94210000000
4	DM-57	Surface	445026.94020000000	5420955.94210000000
5	DM-269	Surface	444996.94020000000	5420937.94210000000
6	DM-496	Surface	444996.94020000000	5420921.94210000000
7	DM-459	Surface	444972.94020000000	5420923.94210000000
8	DM-157	Surface	444990.94020000000	5420943.94210000000
9	DM-233	Surface	444998.94020000000	5420939.94210000000
10	DM-585	Surface	444982.94020000000	5420913.94210000000
11	DM-398	Surface	445006.94020000000	5420929.94210000000
12	DM-493	Surface	444990.94020000000	5420921.94210000000
13	DM-165	Surface	445006.94020000000	5420943.94210000000
14	DM-615	Surface	444980.94020000000	5420909.94210000000
15	DM-351	Surface	445020.94020000000	5420933.94210000000
16	DM-27	Surface	445012.94020000000	5420959.94210000000
17	DM-409	Surface	444976.94020000000	5420927.94210000000
18	DM-374	Surface	445008.94020000000	5420931.94210000000
19	DM-366	Surface	444992.94020000000	5420931.94210000000
20	DM-370	Surface	445000.94020000000	5420931.94210000000
21	DM-221	Surface	445046.94020000000	5420941.94210000000
22	DM-419	Surface	444996.94020000000	5420927.94210000000
23	DM-76	Surface	445036.94020000000	5420953.94210000000
24	DM-30	Surface	445018.94020000000	5420959.94210000000
25	DM-88	Surface	445032.94020000000	5420951.94210000000
26	DM-122	Surface	445034.94020000000	5420947.94210000000
27	DM-137	Surface	445022.94020000000	5420945.94210000000
28	DM-11	Surface	445020.94020000000	5420963.94210000000
29	DM-429	Surface	444964.94020000000	5420925.94210000000
30	DM-264	Surface	444986.94020000000	5420937.94210000000
31	DM-113	Surface	445016.94020000000	5420947.94210000000
32	DM-271	Surface	445000.94020000000	5420937.94210000000
33	DM-503	Surface	445010.94020000000	5420921.94210000000
34	DM-166	Surface	445008.94020000000	5420943.94210000000
35	DM-230	Surface	444992.94020000000	5420939.94210000000
36	DM-9	Reserved	445016.94020000000	5420963.94210000000
37	DM-538	Subsurface	444980.94020000000	5420917.94210000000
38	DM-559	Subsurface	444974.94020000000	5420915.94210000000
39	DM-179	Subsurface	445034.94020000000	5420943.94210000000
40	DM-49	Subsurface	445010.94020000000	5420955.94210000000
41	DM-322	Subsurface	445038.94020000000	5420935.94210000000
42	DM-377	Reserved	445014.94020000000	5420931.94210000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
43	DM-549	Reserved	445002.94020000000	5420917.94210000000
44	DM-258	Reserved	444974.94020000000	5420937.94210000000
45	DM-242	Reserved	445016.94020000000	5420939.94210000000
46	DM-420	Reserved	444998.94020000000	5420927.94210000000
47	DM-250	Reserved	445032.94020000000	5420939.94210000000
48	DM-572	Reserved	445000.94020000000	5420915.94210000000
49	DM-587	Reserved	444986.94020000000	5420913.94210000000
50	DM-54	Reserved	445020.94020000000	5420955.94210000000
51	DM-117	Reserved	445024.94020000000	5420947.94210000000
52	DM-450	Reserved	445006.94020000000	5420925.94210000000
53	DM-189	Reserved	444982.94020000000	5420941.94210000000
54	DM-596	Reserved	445004.94020000000	5420913.94210000000
55	DM-601	Reserved	444978.94020000000	5420911.94210000000
56	DM-286	Reserved	445032.94020000000	5420937.94210000000
57	DM-77	Reserved	445010.94020000000	5420951.94210000000
58	DM-396	Reserved	445002.94020000000	5420929.94210000000
59	DM-464	Reserved	444982.94020000000	5420923.94210000000
60	DM-571	Reserved	444998.94020000000	5420915.94210000000
61	DM-369	Reserved	444998.94020000000	5420931.94210000000
62	DM-532	Reserved	444968.94020000000	5420917.94210000000
63	DM-238	Reserved	445008.94020000000	5420939.94210000000
64	DM-197	Reserved	444998.94020000000	5420941.94210000000
65	DM-413	Reserved	444984.94020000000	5420927.94210000000
66	DM-75	Reserved	445034.94020000000	5420953.94210000000
67	DM-282	Reserved	445022.94020000000	5420937.94210000000
68	DM-495	Reserved	444994.94020000000	5420921.94210000000
69	DM-285	Reserved	445030.94020000000	5420937.94210000000
70	DM-210	Reserved	445024.94020000000	5420941.94210000000
71	DM-163	Reserved	445002.94020000000	5420943.94210000000
72	DM-118	Reserved	445026.94020000000	5420947.94210000000
73	DM-1	Reserved	445016.94020000000	5420965.94210000000
74	DM-457	Reserved	444968.94020000000	5420923.94210000000
75	DM-150	Reserved	445048.94020000000	5420945.94210000000
76	DM-42	Reserved	445022.94020000000	5420957.94210000000
77	DM-123	Reserved	445036.94020000000	5420947.94210000000
78	DM-591	Reserved	444994.94020000000	5420913.94210000000
79	DM-301	Reserved	444986.94020000000	5420935.94210000000
80	DM-602	Reserved	444980.94020000000	5420911.94210000000
81	DM-603	Reserved	444982.94020000000	5420911.94210000000
82	DM-305	Reserved	444994.94020000000	5420935.94210000000
83	DM-345	Reserved	445008.94020000000	5420933.94210000000
84	DM-569	Reserved	444994.94020000000	5420915.94210000000

Appendix A. 2011 Beach Sediment Sample Location Coordinates

Random Selection No. ^a	Station Number ^b	Sample Type	Coordinates ^c	
			X	Y
85	DM-480	Reserved	444964.94020000000	5420921.94210000000
86	DM-187	Reserved	445050.94020000000	5420943.94210000000
87	DM-404	Reserved	444966.94020000000	5420927.94210000000
88	DM-145	Reserved	445038.94020000000	5420945.94210000000
89	DM-170	Reserved	445016.94020000000	5420943.94210000000
90	DM-454	Reserved	444962.94020000000	5420923.94210000000
91	DM-523	Reserved	445000.94020000000	5420919.94210000000
92	DM-306	Reserved	444996.94020000000	5420935.94210000000

^a Station locations were randomly selected from uniform grid nodes at each beach.

^b Station numbers were applied to the uniform grid nodes at each beach prior to randomly selecting station locations at

^c NAD83 UTM Zone 11. Coordinates provided correspond to proposed sample locations represented on Figures A2 through A27 presented in the QAPP Amendment No. 2. Coordinates for actual station locations will be collected in the field.